



Innovating Community Care

Saad Shaukat

Advisors:

Professor Ramon Lecuona Torras

Professor Giovanni Gavetti

A video recording of Saad presenting this paper is available [here](#).



Abstract

Across New York State, residential providers that serve individuals with intellectual and developmental disabilities (I/DD) and older adults confront an accelerating squeeze: demand for placements is rising, direct-support-professional (DSP) turnover is chronic, funding streams are fragmented, and the digital tools meant to streamline care remain siloed. Drawing on international case studies, existing academic literature, and interviews with management of service provider agencies/residential care programs based in New York state, this study maps the operational and financial fault lines that drive cost inflation and resident frustration. It then synthesizes proven design elements, from Hong Kong's inter-generational 'Digital Buddy' mentoring to Germany's standards-based SmartSenior network, into an Integrated Community-Care Platform (ICCP). The proposed hybrid, which couples a modest brick-and-mortar hub with an open-API cloud layer, is projected to trim avoidable labour spend, unlock latent volunteer capacity, and create additional revenue flows, enabling service provider agencies to thrive without the need for philanthropic and other external financing sources.

Executive Summary

New York's network of residential programmes for people with intellectual and developmental disabilities (I/DD) and for older adults is caught in a squeeze: demand for placements is rising sharply, yet providers are hemorrhaging direct-support professionals, duplicating paperwork across incompatible software, and leaving beds empty because referrals stall in a maze of forms and phone calls. Operators report direct-support-professional turnover near or above forty-five percent, eight or more staff hours per resident each month spent re-keying data, and occupancy losses that translate into roughly \$1.2 million in forgone annual revenue across the sample.

A scan of the best international practices shows that these pain points are solvable when technology is deployed through person-centred design and robust human scaffolding. Hong Kong's Digital Buddy trial, which pairs university students with elders for six months of smartphone coaching, raised mental well-being scores while costing almost nothing to run. Korea's IPC3P portal lets citizens co-create care plans and order vetted services, improving shared decision-making and quality-of-life metrics in just six months. Germany's SmartSenior project demonstrates that when every device and service plugs into a digital ecosystem, tele-health and home-safety tools scale without vendor lock-in. Poland's ActGo-Gate layers a digital wallet over a marketplace so older adults can exchange skills or book paid help on a single screen.

Drawing on these lessons, this study proposes an Integrated Community-Care Platform (ICCP), a hybrid hub that consolidates resident registration, volunteer vetting, smart-home alerts, and a micro-payment wallet. Three-year profit-and-loss projections show the familiar start-up dip but a steep climb. Year 1 operates at an expected deficit of about US \$148,000 on revenues of just under US \$20,000 as the core is built and early adopters are onboarded; the shortfall narrows to roughly US \$90,000 in Year 2 as subscription uptake accelerates and fixed expenses plateau. By Year 3, however, the model pivots decisively into profit, forecasting income of approximately US \$2.65 million on revenues of US \$3.63 million, with cost-of-sales mainly token redemptions and payment-processor fees, capped at US \$400,000 and total operating expenses held below US \$586,000. The result is a projected pre-tax margin close to 73 percent, driven by low marginal costs once the digital layer is in place.

Three structural levers drive the gains: automated volunteer matching that replaces roughly one in five overtime shifts; a self-service referral portal that halves intake time and converts idle beds into an estimated \$265,000 in annual revenue per hundred residents; and a tiered subscription model whose \$4.99–\$9.99 monthly fees scale with negligible marginal cost. If even conservative benchmarks hold, the ICCP offers New York service

provides a replicable route to workforce stability, higher capacity, and a more transparent, person-centred experience for residents and families alike.

1. **Introduction and Problem Statement**

New York's residential ecosystem for individuals with intellectual and developmental disabilities (I/DD) and for older adults sits at a critical juncture. Demand for long-term, community-based supports rose by nearly one-fifth between 2014 and 2024, yet state reimbursement rates have failed to keep pace with payroll inflation or mounting regulatory overhead. Four representative agencies i.e. Living Resources (Albany), Mary Cariola Center (Rochester), Community Options Inc. (state-wide), and L'Arche Syracuse, illustrate how the resulting squeeze manifests on the ground. Their management teams report direct-support-professional (DSP) turnover of 31 to 48 percent, eight or more staff hours per resident each month lost to duplicate data entry, and an average occupancy gap of 7.6 percent despite multi-year waiting lists. Each hour of DSP overtime or each vacant bed erodes already-thin margins, leaving limited bandwidth for programme innovation or technology integration.

International evidence suggests that these pain points are not inevitable. Integrated digital 'front doors' that couple person-centred workflow design with robust human supports have improved mental-well-being in Hong Kong, streamlined shared decision-making in South Korea, and enabled scalable tele-monitoring in Germany. Yet in New York the landscape remains fragmented: pilot projects e.g. smart-home sensors at Living Resources, AI-supported teaching aids at Mary Cariola etc. run in parallel with no data interoperability. Volunteers keen to help abandon onboarding processes that stretch to six weeks, and families juggle multiple log-ins merely to check medication logs or schedule respite care.

This report therefore addresses the crucial question of how a hybrid brick-and-mortar hub paired with a digital ecosystem, hereafter the proposed Integrated Community-Care Platform (ICCP), can mitigate workforce pressure, unlock volunteer capacity, and convert idle bed-days into sustainable revenue without compromising person-centred values. To answer that question, the paper is categorized into five sections. It begins with a methods section; followed by two companion findings sections which distil what the data says i.e. first, the operational and financial pain points inside today's residences; then, the best-practice design patterns already solving similar problems abroad. Building on that evidence, the report then introduces the Integrated Community-Care Platform (ICCP) architecture. A subsequent impact and sustainability analysis translates the design into projected dollars, labour hours, and quality metrics, while a policy and regulatory discussion situates the platform inside New York's evolving Medicaid, workforce-credential, and digital-equity agendas. The study closes with conclusions and next steps.

1. **Methodology**

1. **Primary research**

Four semi-structured interviews (60–75 minutes each) were conducted between 9 April and 25 April 2025 with executive teams at Living Resources, Mary Cariola Center, Community Options Inc., and L’Arche Syracuse. A common guide probed staffing patterns, technology stack, financial pressures, volunteer utilisation, and current innovation efforts. Sessions were recorded, transcribed verbatim, and analyzed.

1. Secondary research

An evidence scan of academic articles published between 2012 and 2024 was conducted that evaluated technology-enabled community-care interventions delivering measurable operational, financial, or health outcomes. Industry sources (OPWDD reimbursement schedules, New York DOH workforce dashboards) and provider Form 990 filings rounded out these data sources.

1. Comparative analysis framework

Findings from primary and secondary sources were mapped onto four evaluation lenses i.e. person-centeredness, interoperability, workforce impact, and financial sustainability, to surface gaps and opportunities. Insights from best-practice settings abroad informed the functional specification of the ICCP discussed in later sections.

1. Limitations

The interview sample, though diverse in size and geography, is not statistically representative of all New York providers, and some financial figures rely on self-report. Nevertheless, the mixed-methods approach offers a sufficiently robust foundation for the strategic recommendations that follow.

1. Findings - Operational and Financial Pain Points

1. Workforce instability

Every programme director described direct-support-professional (DSP) turnover as the single most destabilising force in day-to-day operations. Living Resources spoke of ‘constantly running new-hire classes,’ only to see many recruits leave before their first annual review. Community Options called the situation ‘near-crisis,’ noting that supervisors regularly double-shift to preserve mandated staff-to-resident ratios. Managers at Mary Cariola and L’Arche echoed this theme, adding that turnover erodes team cohesion and forces experienced staff to spend time training new comers rather than engaging residents.

1. Administrative drag

All four agencies maintain separate electronic health-record or billing platforms in addition to OPWDD's required documentation portals. Management characterised the result as 'double entry' or 'triple entry' of identical data e.g. medication logs, incident reports, quarterly service plans etc. into systems that cannot share information. A L'Arche manager summarised the problem by saying that paperwork was eating away significant portion of their programme time. Attempts to purchase vendor-built API bridges stalled once price quotes arrived and, more importantly, once agencies realised OPWDD would still require its own documentation mechanisms.

1. Under-used volunteer capacity and cost constraints

Each facility described largely untapped pool of university, faith-based, and other volunteers. The main chokepoint is the background-check and onboarding processes: prospective helpers must complete verifications, and clear training modules that resemble the ones offered to full-time employees. Service providers/agencies feel that the costs to verify and onboard volunteers far exceeds their utility, which is why they prefer to go with either employment contracts, or paid internships for more technical administrative tasks.

1. Admissions bottlenecks and idle capacity

Despite lengthy wait-lists, all interviewees acknowledged episodic vacancies that persist while referral packets circulate among county case-workers, medical evaluators, and agency intake staff. A Community Options administrator noted that files often 'expire in transit'; for example, psychological assessments lapse before the rest of the documentation is assembled, restarting the cycle. Directors see this friction as both a revenue leak and a family-stress multiplier.

1. Fragmented technology pilots

Every site is experimenting with at least one standalone technology e.g. smart-home motion sensors, electronic medication alerts, or classroom tablets equipped with adaptive software. Staff appreciate these tools but lament what one Mary Cariola manager called 'app fatigue'. Separate log-ins, separate reporting formats, and no consolidated dashboard are huge pain points from an administrative point of view. Management worries that maintenance subscriptions accumulate year after year without generating organisation-wide efficiencies.

1. Synthesis of constraints

Taken together, the interviews point to three structural barriers:

1. Information silos that inflate clerical workload and block data-driven decision-making.

2. Process friction in volunteer clearance and admissions, that leaves human and physical capacity under-used and increased costs.
3. Technology fragmentation that prevents promising pilots from scaling across programmes.

Any intervention that hopes to ease workforce pressure or improve margins must tackle these barriers in an integrated way i.e. linking labour relief, volunteer mobilisation, and real-time data exchange rather than addressing each pain point in isolation.

1. **Findings - Global Best-Practice and Technology Scan**

A review of literature on digitally enabled community care reveals a convergent playbook for tackling the very constraints New York providers described. Although contexts span four continents, successful initiatives share five design principles: person-centered orchestration, low-friction transactions, standards-based interoperability, security-by-design, and human scaffolding that converts technology into lived benefit.

1. **Person-centered orchestration**

South Korea's IPC3P platform begins with an eight-step needs assessment that older adults co-author; personalized care-plan 'cards' then drive service recommendations and purchasing. A six-month field study showed significant gains on the shared-decision-making scale and across all quality-of-life domains. The Dutch 'eleven-cube' portal for frail elders took a similar user-centered path: color coded tiles for contacts, services, community maps, and medication reminders were iteratively refined through in-home usability tests. Early enthusiasm waned after launch, which highlights the importance of ongoing motivational triggers. This insight was also echoed by New York staff who see attrition when new apps lack social hooks.

1. **Low-friction, trust-building transactions**

Poland's ActGo-Gate tackles two frictions noted by New York interviewees i.e. volunteer onboarding and micropayments, by embedding an escrow-protected wallet for local services. Transactions occur on a single screen, and a dedicated 'integrator' role vets providers, mirroring the trust-broker function New York directors said they lack. Hong Kong's Digital Buddy trial, while less transactional, demonstrates that pairing older adults with student 'buddies' for hands-on smartphone coaching can lift mental-well-being scores without large budgets.

1. **Standards-based interoperability**

Germany's SmartSenior consortium shows the dividends of building on digital interfaces from day one. Vital-sign wearables, home-automation sensors, and vehicle accident-alert devices all feed a shared information

logistics backbone. This approach contrasts starkly with New York's siloed pilots. SmartSenior partners report smoother insurer negotiations precisely because the architecture anticipates multi-vendor scaling.

1. Security-by-design and scalable analytics

As facilities accumulate sensitive resident data, security and analytics must advance in lock-step. A recent study proposes IoT + digital-twin framework secured by a consortium blockchain; computer tests show this setup responds more quickly and enhances anomaly-detection precision. A complementary Greek project uses artificial intelligence to flag early frailty signs; as it plugs into standard health-data connectors, agencies can start with a small rollout and add more services later to ensure integrated care. Both papers underline that auditability and modular AI are prerequisites for payer trust, a point repeatedly raised in New York interviews when discussing OPWDD oversight.

1. Remote-care reach and hardware equity

U.S. Medicare data confirm that device ownership and broadband are still prerequisites for telehealth adoption, with pronounced gaps among rural, Black, and Hispanic elders. Successful international programmes explicitly provision loaner devices (Digital Buddy) or rely on tablet kiosks in public spaces (Croatian digital-living study) to close that access gap.

1. Assistive robotics and smart-home ecosystems

A systematic review of 63 robotics studies finds the field approaching real-world readiness for fall detection and mobility aids, while social-presence robots remain less mature. Crucially, reviewers call for shared datasets and cloud-centered architectures, which is exactly the collaborative infrastructure that an integrated platform can provide to accelerate future pilots within New York facilities.

1. Synthesis for the ICCP design

Collectively, the literature leads to hypotheses that any New York solution should:

- Begin with a resident-signed needs profile that auto-generates care-plan modules (IPC3P);
- Embed a wallet to remove friction in volunteer matching and micro-payments (ActGo-Gate);
- Adopt open standards from the outset, enabling device and vendor agnosticism (SmartSenior);
- Incorporate blockchain or equivalent audit layers to satisfy state oversight as data flows grow (AI-secure framework);

- Allocate budget for device lending or kiosk access to ensure broadband inequities do not derail uptake (Digital Buddy, Croatian study);
- Design for future robotics and sensor add-ons by maintaining a cloud-ready, API-first architecture (robotics review).

These elements collectively form the blueprint for the Integrated Community-Care Platform detailed in Section 6.

1. Integrated Community-Care Platform (ICCP) - Solution Architecture

1. Design philosophy

The ICCP is conceived as a single digital front door wrapped around a modest brick-and-mortar hub. It combines the person-centered workflow logic observed in Korea’s IPC3P with the open-standards backbone of Germany’s SmartSenior, while directly answering the paperwork, labour, and volunteer bottlenecks reported by New York providers. From the outset, three guard-rails shape every design choice: (i) resident autonomy first, (ii) vendor and device agnosticism, and (iii) audit-ready data flows that withstand OPWDD scrutiny.

1. User roles and core journeys

During onboarding each participant selects one of three roles that unlock distinct dashboards and pricing tiers:

Role	Core goals	Key screens	Payment logic
Resident/Family (I/DD individual or older adult)	Manage care tasks, request help, monitor wallet.	Home Feed, Requests, Health & Safety.	Nominal monthly subscription.
Volunteer	Find residents to help, earn hours.	Shift-Match, Badges, Wallet	Free; earns tokenized hours.
Community Business/Agency Partner	List paid or pro-bono services, receive bookings.	Listings, Orders, Analytics.	Commission on transactions.

The three-role split mirrors ActGo-Gate’s triadic stakeholder model and gives the platform immediate cross-subsidy potential.

1. Functional modules

- 1. **Role-based dashboard** – a card layout surfaces upcoming shifts, service requests, community events, and sensor alerts in one scroll to reduce ‘app fatigue’ noted by New York staff.
- 2. **Volunteer Exchange** – an AI-aided matching engine ranks open requests by geography, skill, and clearance status, compressing onboarding from weeks to days once a background-check API confirms results.
- 3. **Wallet** – Stripe rails handle fiat top-ups, while an internal ledger awards one token per volunteer hour; tokens offset subscription fees or buy marketplace offers. The mechanism reproduces the low-friction barter that drove engagement in Poland.
- 4. **Marketplace & Community Layer** – Local businesses post grocery deliveries, respite outings, or therapy sessions; nonprofits can launch micro-crowdfunds. Gamified ‘community quests’ nudge participation.
- 5. **Safety & Sensor Hub** – Platform ingest data from motion detectors, door sensors, and medication provisions; anomaly rules trigger alerts to the resident’s circle of support. This prepares a path for future robotics or digital-twin pilots flagged in the literature.

1. Implementation phasing

Phase	Timeline	Deliverables	Success metric
I - Core Identity & Wallet	Q4 2025	Resident/Volunteer sign-up, wallet top-up, Stripe settlement	≥ 50 active user wallets
II - Volunteer Exchange	Q2 2026	Shift-matching AI, background-check API, token rewards	≥ 200 volunteer hours / month
III - Clinical & Sensor Integration	Q4 2026	Alert dashboard, care-plan API	90% sensor alerts triaged < 5 min

1. Alignment with New York pain points

- Paperwork duplication falls once OPWDD-mandated forms are auto-populated from the care-plan.
- Volunteer bottlenecks shrink as clearance and shift-matching compress into a single workflow.
- Occupancy delays shorten when county case-workers upload referral packets directly into the resident's onboarding queue, visible to all parties in real time.
- Technology silos dissolve because sensor vendors and developers write to shared, documented APIs, not individual portals.

In short, the ICCP translates global best practice and local interview insights into a coherent, standards-based architecture poised to relieve labour pressure, unlock community capacity, and modernise data stewardship for New York's residential-care providers.

1. Impact and Sustainability Analysis

The viability of the Integrated Community-Care Platform (ICCP) hinges on three intertwined dimensions: economic performance, workforce relief, and social-value creation. Three-year profit-and-loss projections drawn from the accompanying spreadsheet outline a financial trajectory that starts in deficit, crosses breakeven midway through Year 2, and delivers a robust surplus by the end of Year 3.

1. Financial trajectory

During Year 1 the ICCP runs deliberately heavy on product build-out and regulatory set-up, generating US \$20,005 in subscription and transaction revenue against US \$122,650 in operating expenses. The result is a planned pre-tax loss of US \$147,645 while core code, background-check integrations, and audit logging are completed. In Year 2, with volunteer-exchange and marketplace modules live, revenue rises more than thirteen-fold to US \$272,935 while expenses climb only modestly to US \$247,500, narrowing the net loss to US \$89,565. By Year 3, when clinical-sensor connectors and care-plan APIs are fully operational, revenue tops US \$3.63 million and net profit before tax reaches US \$2.65 million, a margin of roughly 73 percent. Because cloud hosting, compliance monitoring, and customer-support staffing grow sub-linearly, each additional resident or volunteer transaction expands the surplus.

1. Workforce and cost offsets

Although the model does not treat labour savings as top-line revenue, reductions in overtime for DSPs underpin its expense restraint. Interviews indicate that duplicate data entry and last-minute staffing gaps are the largest controllable cost drains. The ICCP's auto-populated OPWDD forms and AI-aided volunteer matching are

designed to capture those ‘hidden margins’. Fewer duplicate hours, quicker shift coverage, and shorter admission cycles result in reduced costs. Facilities that adopt the platform will therefore experience a double benefit: the subscription cost appears in their expense column, but parallel overtime and unbilled administrative hours should fall.

1. Social return on investment

Monetary performance alone cannot justify new infrastructure in the I/DD/older adult care industry. The ICCP produces non-financial value in three measurable ways:

1. Volunteer engagement: Background-check automation is expected to move clearance time from ‘weeks to days,’ freeing dormant community capacity.
2. Family transparency: Single-dashboard access to medication logs, shift rosters, and sensor alerts reduces care-giver anxiety and improves resident–family contact.
3. Equity of access: A built-in device-lending pool and subsidy for low-income users mirror the inclusion mechanisms that drove uptake in the Digital Buddy and Croatian studies, ensuring that broadband gaps do not become care gaps.

1. Risk mitigation and long-term durability

The most salient risks i.e. regulatory shift, vendor lock-in, and cyber-security breaches, are hedged through design choices already embedded in the architecture section. Financially, the platform maintains a conservative 10% reserve for contingencies line in each operating budget, cushioning unexpected compliance costs. In the outer years (post-Year 3), incremental module licensing to third-party agencies offers an additional revenue hedge, widening the platform’s margin without heavy capital outlay. Collectively, these elements indicate that the ICCP can move from start-up deficit to sustainable surplus within a three-year window while simultaneously easing labor pressure and elevating resident experience, therefore meeting both fiscal and mission-driven imperatives articulated by New York providers.

1. Policy and Regulatory Implications

The Integrated Community-Care Platform (ICCP) lands at the intersection of several fast-moving policy agendas in New York and Washington, D.C. Viewed through that lens, the platform is not merely a technical solution but a catalyst that can either reinforce or frustrate ongoing reforms in Medicaid financing, workforce stabilization, and digital-equity law.

1. Alignment with Medicaid value-based goals

New York's 1115 waiver renewal and OPWDD's 2023-2027 Strategic Plan both pivot toward value-based purchasing that rewards measurable quality rather than units of service. The ICCP's built-in metrics (occupancy latency, volunteer hours, incident-resolution times) map cleanly onto the 'quality bundle' indicators that state actuaries are drafting for future Managed Care capitation rates. Agencies that adopt the platform could therefore enter pay-for-performance contracts sooner, capturing shared-savings bonuses while the rest of the field remains volume-based.

1. Leveraging the HCBS Settings Rule and remote-care waivers

CMS (Centers for Medicare and Medicaid Services) guidance allows electronic service documentation and passive remote-monitoring to satisfy the Home and Community Based Services (HCBS) Settings Rule, provided the individual and guardian give informed consent. Because the ICCP's care-plan engine records e-signatures and stores immutable consent logs, facilities can document compliance without paper files; a capability that should streamline state survey visits. Moreover, New York's emergency telehealth flexibilities, made permanent in 2023, mean that sensor alerts and virtual check-ins triggered by the ICCP can be billed under existing Medicaid telehealth codes, creating a new revenue stream for agencies willing to invest in the infrastructure.

1. Workforce credentialing and reciprocity

Direct-support-professional shortages have pushed Albany to explore a tiered credential that recognizes micro-competencies acquired on the job. Because the ICCP tracks volunteer and DSP tasks, the same ledger can double as a digital skills transcript, showing evidence that a worker has, for example, completed ten medication-administration shadows or twenty hours of positive-behaviour-support coaching. If OPWDD finalizes its tiered credential, the platform could become a low friction reporting conduit, reducing administrative burden on providers and staff alike.

1. Modernizing volunteer screening law

All four interview sites cited verification backlog and training as a critical barrier to volunteer engagement. ICCP shows that automating queries can compress clearance time to under ten days, but the platform still must front the per-volunteer fee. Aggregated platform analytics could provide legislators with the empirical basis to argue for subsidised or tiered pricing, especially for one-time, low-risk volunteer roles, without compromising safety mandates contained in OPWDD Administrative Directive #2022-01.

1. Interoperability, privacy, and emerging national standards

Federal rulemaking under the 21st Century Cures Act is steering all certified health-IT towards standardized APIs. By adopting those standards from day one, the ICCP positions participating agencies to satisfy forthcoming ‘information-blocking’ attestations that otherwise apply only to hospitals and physicians but are widely expected to expand. At the same time, New York’s SHIELD Act imposes breach-notification duties on any entity that processes personal information, including e-mail addresses. The platform’s consortium-chain audit log creates a tamper-evident trail that can be furnished to regulators within the SHIELD Act’s ten-day window, reducing litigation exposure.

1. Digital-equity and broadband funding

The Digital Buddy study and Croatian digital-inclusion work both show that device-lending and in-app coaching offset the broadband gap. Because New York is slated to receive more than \$664 million under the federal Broadband Equity, Access, and Deployment (BEAD) Program, pilot sites that bundle an ICCP device-library proposal may qualify for grant match, lowering capital outlay.

1. Policy recommendations

1. Create an OPWDD ‘digital-innovation carve-out’; allow providers that implement standards-based platforms like the ICCP to bill an additive per-member-per-month fee for data-sharing and outcomes reporting.
2. Institute tiered volunteer-screening fees tied to risk level and clearance reciprocity across agencies, using ICCP analytics as the evaluation backbone.
3. Publish a state interoperability roadmap signalling that HL7-FHIR will become the default for community-care IT procurements by 2028; early adopters receive grant-match priority.
4. Align workforce-credential pilots with the platform’s task-logging schema so micro-credentials attach automatically to worker profiles, reducing paperwork for educators and supervisors.

By threading through existing statutes rather than circumventing them, the ICCP also offers regulators a test-bed for modernizing rules, and gives providers a compliant pathway to finer-grained quality payments, streamlined audits, and an expanded volunteer pool.

1. Conclusions and Next Steps

New York’s residential programs for people with intellectual and developmental disabilities and for older adults stand in a widening gap between surging demand and shrinking operational slack. Conversations with leadership at Living Resources, Mary Cariola Center, Community Options, and L’Arche Syracuse paint an

almost uniform picture: frontline turnover drains experience, duplicative paperwork crowds out direct care, and weeks slip by while vacant beds await completed referral packets. Those interviews also hint at a solution space: any intervention that can give staff back time, shorten intake cycles, and mobilize the dormant energy of community volunteers would change the tone on the floor as surely as it would improve the balance sheet.

A scan of international evidence suggests such interventions are no longer theoretical. Hong Kong's Digital Buddy mentoring shows that a light-touch human scaffold can lift mental well-being at negligible cost. South Korea's IPC3P portal proves that when residents co-author their own care plans, shared-decision scores and quality-of-life indices move in tandem. Germany's SmartSenior project demonstrates the dividend of tying every new sensor or service to standardized interfaces from day one, preventing tech siloes to emerge among service providers. Poland's ActGo-Gate adds a wallet that erases the friction of micro-payments and volunteer stipends, a design move tailor-made for the state's cumbersome clearance regime. Weaving those threads together yields the Integrated Community-Care Platform (ICCP) proposed here: a standards-based digital spine wrapped around a modest brick-and-mortar hub, engineered so that each resident, DSP, volunteer, and partner agency meets at a single data-sharing doorway.

Financial models grounded in conservative uptake assumptions show the ICCP running deliberately in the red while its core code and compliance scaffolding are built, crossing break-even halfway through the second year, and finishing third year with a surplus. Yet the real dividend is time: time staff regain when OPWDD forms auto-populate, time volunteers save when verification results flow straight into the platform, and time families recover when every medication log or motion-sensor alert appears on one screen. That reclaimed time, multiplied across a workforce and a community, is the margin that turns sustainability from slogan to lived practice.

Because the platform's metrics i.e. incident-resolution latency, volunteer hours per resident, admission cycle length etc. mirror indicators already surfacing in Medicaid's shift toward value-based payment, early adopters stand to capture quality bonuses long before the field at large. And because every audit trail is hashed to an immutable ledger, agencies once anxious about HIPAA or SHIELD-Act exposure can meet inspectors with a click rather than a scramble. What remains is execution: securing pilot approval, co-designing the resident interface, and publishing an open API so that device makers and sister agencies can plug in without waiting for bespoke development. If those next steps hold to schedule, New York could move from a patchwork of well-meaning pilots to a statewide, data-literate care ecosystem in which staff stay, volunteers flow, beds fill, and residents feel the difference not in policy memos but in daily life.

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Annexures

Profit and Loss Projection Year 1

Integrated Community Care Platform (ICCP)

Fiscal Year Begins

Jan-25

	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25	YEAR LY
Revenue (Sales)													
Subscription MDD	5	8	10	22	24	65	100	111	202	504	842	1,407	2,500
Subscription 62*	10	18	22	59	107	194	250	623	1,146	2,072	3,750	6,782	15,355
Subscription Dual	5	7	10	14	19	26	37	51	72	100	129	195	674
B2B token redemption	15	18	22	27	33	41	50	61	74	90	110	134	675
Donations													0
													0
Total Revenue	35	52	74	123	193	325	545	926	1,592	2,767	4,842	8,519	20,005
Cost of Sales													
Tech Support	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	25,000
Services													0
Customer Success													0
DevOps	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	20,000
													0
													0
Total Cost of	3,750	3,750	3,750	3,750	3,750	3,750	3,750	3,750	3,750	3,750	3,750	3,750	45,000
Gross Profit	-3,715	-3,498	-3,476	-3,627	-3,557	-3,425	-3,205	-2,824	-2,157	-903	1,092	4,769	-24,995
Expenses													
Salary expenses	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	50,000
Payroll expenses	625	625	625	625	625	625	625	625	625	625	625	625	7,500
Outside services													0
Supplier	417	417	417	417	417	417	417	417	417	417	417	417	5,000
Repairs/maintenance	417	417	417	417	417	417	417	417	417	417	417	417	5,000
Advertising	833	833	833	833	833	833	833	833	833	833	833	833	10,000
Car, delivery and travel													0
Accounting and legal	833	833	833	833	833	833	833	833	833	833	833	833	10,000
Rent & Related Costs	833	833	833	833	833	833	833	833	833	833	833	833	10,000
Telephone	167	167	167	167	167	167	167	167	167	167	167	167	2,000
Utilities													0
Insurance	167	167	167	167	167	167	167	167	167	167	167	167	2,000
Taxes (real estate, etc.)													0
Interest													0
Depreciation													0
Other expenses (specify)													0
Other expenses (specify)													0
Other expenses (specify)													0
Misc. (unspecified)	833	833	833	833	833	833	833	833	833	833	833	833	10,000
Sub-total	9,292	9,292	9,292	9,292	9,292	9,292	9,292	9,292	9,292	9,292	9,292	9,292	111,500
Reserve for Contingencies	929	929	929	929	929	929	929	929	929	929	929	929	11,350
Total Expenses	10,221	10,221	10,221	10,221	10,221	10,221	10,221	10,221	10,221	10,221	10,221	10,221	122,850
Net Profit Before Taxes	-12,936	-13,919	-13,892	-13,848	-13,773	-13,645	-13,426	-13,045	-12,377	-11,203	-9,329	-5,452	-147,645
Federal Income													
State Income													
Local Income													
Net Operating	-12,936	-13,919	-13,892	-13,848	-13,773	-13,645	-13,426	-13,045	-12,377	-11,203	-9,329	-5,452	-147,645

Profit and Loss Projection Year 2

Integrated Community Care Platform (ICCP)

Fiscal Year Begins

Jan-26

	Jan-26	Feb-26	Mar-26	Apr-26	May-26	Jun-26	Jul-26	Aug-26	Sep-26	Oct-26	Nov-26	Dec-26	YTD
Revenue (Sales)													
Subscription/MD	1,609	1,640	1,604	1,494	1,752	1,147	1,590	4,185	4,705	5,381	6,153	7,034	44,845
Subscription/2+	7,757	8,071	10,544	11,690	13,244	15,170	17,340	19,830	22,494	25,943	29,667	33,924	214,215
Subscription/Dual	222	254	291	332	310	434	496	567	640	741	847	960	6,511
B2B subscription redemption	291	316	343	372	404	431	475	514	559	607	651	714	5,694
Donations													0
													0
													0
Total Revenue	9,889	11,281	12,832	14,711	16,381	19,184	21,917	25,035	28,594	32,671	37,325	42,644	272,425
Cost of Sales													
Tech Support	6,250	6,250	6,250	6,250	6,250	6,250	6,250	6,250	6,250	6,250	6,250	6,250	75,000
Services													0
Customer Success													0
DevOps	3,333	3,333	3,333	3,333	3,333	3,333	3,333	3,333	3,333	3,333	3,333	3,333	40,000
													0
													0
													0
Total Cost of	9,583	9,583	9,583	9,583	9,583	9,583	9,583	9,583	9,583	9,583	9,583	9,583	115,000
Gross Profit	297	1,698	3,249	5,128	7,217	9,605	12,334	15,452	19,015	23,018	27,742	33,061	157,425
Expenses													
Salary expense	8,333	8,333	8,333	8,333	8,333	8,333	8,333	8,333	8,333	8,333	8,333	8,333	100,000
Payroll expense	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250	15,000
Outside services													0
Supplier	833	833	833	833	833	833	833	833	833	833	833	833	10,000
Repairs/maintenance	833	833	833	833	833	833	833	833	833	833	833	833	10,000
Advertising	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	20,000
Car, delivery and travel													0
Accounting and legal	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	20,000
Rent & Related Costs	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	20,000
Telephone	417	417	417	417	417	417	417	417	417	417	417	417	5,000
Utilities													0
Insurance	417	417	417	417	417	417	417	417	417	417	417	417	5,000
Taxes (real estate, etc.)													0
Interest													0
Depreciation													0
Other expense (specify)													0
Other expense (specify)													0
Other expense (specify)													0
Other expense (specify)													0
Misc. (unspecified)	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	20,000
Sub-total	18,750	18,750	18,750	18,750	18,750	18,750	18,750	18,750	18,750	18,750	18,750	18,750	225,000
Reserve for Contingencies	1875	1875	1875	1875	1875	1875	1875	1875	1875	1875	1875	1875	22,500
Total Expenses	20,625	20,625	20,625	20,625	20,625	20,625	20,625	20,625	20,625	20,625	20,625	20,625	247,500
Net Profit Before Taxes	-20,328	-18,927	-17,326	-15,497	-13,408	-11,020	-8,291	-5,173	-1,610	2,463	7,117	12,436	-89,565
Federal Income													
State Income													
Local Income													
Net Operating	-20,328	-18,927	-17,326	-15,497	-13,408	-11,020	-8,291	-5,173	-1,610	2,463	7,117	12,436	-89,565

Profit and Loss Projection Year 3

Integrated Community Care Platform (ICCP)

Fiscal Year Begins

Jan-27

	Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	YTD
Revenue (Sales)													
Subscription MDD	9,031	11,592	14,079	15,098	24,513	31,464	40,314	51,039	64,538	85,405	109,423	140,708	605,077
Subscription C2+	43,543	55,894	71,747	92,092	119,200	151,720	194,757	249,916	320,077	415,072	528,670	675,591	2,917,474
Subscription Dual	1,242	1,595	2,047	2,627	3,271	4,227	5,554	7,128	9,148	11,741	15,070	19,341	82,991
B2B token redemption	1,345	1,901	1,949	2,024	2,991	2,170	2,242	2,396	2,393	2,472	2,554	2,628	26,638
Donation													0
													0
													0
Total Revenue	55,461	70,981	90,441	109,851	148,194	189,691	242,939	318,269	396,954	514,491	655,917	841,278	3,632,880
Cost of Sales													
Tech Support	16,667	16,667	16,667	16,667	16,667	16,667	16,667	16,667	16,667	16,667	16,667	16,667	200,000
Services													0
Customer Success	8,333	8,333	8,333	8,333	8,333	8,333	8,333	8,333	8,333	8,333	8,333	8,333	100,000
DevOps	8,333	8,333	8,333	8,333	8,333	8,333	8,333	8,333	8,333	8,333	8,333	8,333	100,000
													0
													0
													0
Total Cost of	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	400,000
Gross Profit	22,128	37,648	57,108	76,518	114,861	156,358	209,606	277,936	365,621	478,158	622,584	807,945	3,232,880
Expenses													
Salary expense	20,833	20,833	20,833	20,833	20,833	20,833	20,833	20,833	20,833	20,833	20,833	20,833	250,000
Payroll expense	3,125	3,125	3,125	3,125	3,125	3,125	3,125	3,125	3,125	3,125	3,125	3,125	37,500
Outside services													0
Supplies	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	25,000
Repairs/maintenance	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	25,000
Advertising	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	50,000
Car, delivery and travel													0
Accounting and legal	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	25,000
Rent & Related Costs	3,333	3,333	3,333	3,333	3,333	3,333	3,333	3,333	3,333	3,333	3,333	3,333	40,000
Telephone	833	833	833	833	833	833	833	833	833	833	833	833	10,000
Utilities													0
Insurance	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	20,000
Taxes (real estate, etc.)													0
Interest													0
Depreciation													0
Other expense (specify)													0
Other expense (specify)													0
Other expense (specify)													0
Misc. (unspecified)	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	50,000
Sub-total	44,375	44,375	44,375	44,375	44,375	44,375	44,375	44,375	44,375	44,375	44,375	44,375	532,500
Reserve for Contingencies	4438	4438	4438	4438	4438	4438	4438	4438	4438	4438	4438	4438	52,250
Total Expenses	48,813	48,813	48,813	48,813	48,813	48,813	48,813	48,813	48,813	48,813	48,813	48,813	584,750
Net Profit Before Taxes	-26,485	-11,165	8,495	32,705	66,048	107,546	160,792	229,123	316,811	429,345	573,771	759,132	2,648,130
Federal Income													
State Income													
Local Income													
Net Operating	-26,485	-11,165	8,495	32,705	66,048	107,546	160,792	229,123	316,811	429,345	573,771	759,132	2,648,130

REVENUE ASSUMPTIONS

User categories	Subs fee	Market size	1Y	2Y	3Y	users as % of market
IDD	\$ 4.33	8,753,374	282	1,410	28,138	28%
62+	\$ 3.33	21,102,341	673	3,336	67,327	68%
Deal qualified	\$ 4.33	1,204,065	33	134	3,876	4%
Volunteers	\$ -	-	-	-	-	0%

B2B

3%

Annual

growth rate 1Y

400%

growth rate 2Y

1300%

Churn rate subs

5%

Churn rate B2B

1%

Monthly

growth rate IDD

16%

growth rate 62+

30%

growth rate Deal

47%

growth rate B2B

23%

Avg sales revenue from platform

\$ 500

User growth chart

IDD

Jan

Feb

Mar

Apr

May

Jun

Jul

Aug

Sep

Oct

Nov

Dec

1Y

2Y

3Y

62+

1Y

2Y

3Y

Deal

1Y

2Y

3Y

B2B users

1Y

2Y

3Y

B2B sales

1Y

2Y

3Y

1

322

1,890

2

363

2,323

3

422

2,392

6

482

3,827

11

551

4,912

13

631

6,305

22

721

8,093

36

825

10,388

61

943

10,334

101

1,078

17,185

163

1,233

21,969

282

1,410

28,138

1

776

4,359

2

888

5,535

3

1,015

7,182

6

1,161

9,218

11

1,328

11,833

13

1,519

15,188

35

1,737

19,495

63

1,386

25,024

115

2,271

32,120

207

2,537

41,228

375

2,370

52,920

673

3,336

67,327

1

45

243

1

51

320

2

58

410

3

67

526

4

76

676

5

87

867

7

99

1,113

10

114

1,428

14

130

1,833

20

148

2,353

28

170

3,020

33

334

3,876

1

11

11

2

12

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5

32

32

6

33

33

7

34

34

9

35

35

\$

500

\$

630

\$

745

\$

903

\$

1,110

\$

1,354

\$

3,714

\$

30,538

\$

11,433

\$

12,404

\$

13,458

\$

14,609

\$

61,483

\$

63,321

\$

65,621

\$

67,730

\$

70,030

\$

72,345

\$

1,653

\$

2,017

\$

2,462

\$

3,005

\$

3,668

\$

4,477

\$

17,185

\$

18,644

\$

20,228

\$

21,945

\$

23,803

\$

26,803

\$

73,758

\$

82,394

\$

95,118

\$

111,931

\$

111,931

\$

131,931

\$

158,931

\$

193,931



Innovating Community Care

Saad Shaukat

To watch a recording of Saad giving a **presentation** on this paper please click **here**.

Advisors:

Professor Ramon Lecuona Torras

Professor Giovanni Gavetti

Abstract

Across New York State, residential providers that serve individuals with intellectual and developmental disabilities (I/DD) and older adults confront an accelerating squeeze: demand for placements is rising, direct-support-professional (DSP) turnover is chronic, funding streams are fragmented, and the digital tools meant to streamline care remain siloed. Drawing on international case studies, existing academic literature, and interviews with management of service provider agencies/residential care programs based in New York state, this study maps the operational and financial fault lines that drive cost inflation and resident frustration. It then synthesizes proven design elements, from Hong Kong's inter-generational 'Digital Buddy' mentoring to Germany's standards-based SmartSenior network, into an Integrated Community-Care Platform (ICCP). The proposed hybrid, which couples a modest brick-and-mortar hub with an open-API cloud layer, is projected to trim avoidable labour spend, unlock latent volunteer capacity, and create additional revenue flows, enabling service provider agencies to thrive without the need for philanthropic and other external financing sources.

Executive Summary

New York's network of residential programmes for people with intellectual and developmental disabilities (I/DD) and for older adults is caught in a squeeze: demand for placements is rising sharply, yet providers are hemorrhaging direct-support professionals, duplicating paperwork across incompatible software, and leaving beds empty because referrals stall in a maze of forms and phone calls. Operators report direct-support-professional turnover near or above forty-five percent, eight or more staff hours per resident each month spent re-keying data, and occupancy losses that translate into roughly \$1.2 million in forgone annual revenue across the sample.

A scan of the best international practices shows that these pain points are solvable when technology is deployed through person-centred design and robust human scaffolding. Hong Kong's Digital Buddy trial, which pairs university students with elders for six months of smartphone coaching, raised mental well-being scores while costing almost nothing to run. Korea's IPC3P portal lets citizens co-create care plans and order vetted services, improving shared decision-making and quality-of-life metrics in just six months. Germany's SmartSenior project demonstrates that when every device and service plugs into a digital ecosystem, tele-health and home-safety tools scale without vendor lock-in. Poland's ActGo-Gate layers a digital wallet over a marketplace so older adults can exchange skills or book paid help on a single screen.

Drawing on these lessons, this study proposes an Integrated Community-Care Platform (ICCP), a hybrid hub that consolidates resident registration, volunteer vetting, smart-home alerts, and a micro-payment wallet. Three-year profit-and-loss projections show the familiar start-up dip but a steep climb. Year 1 operates at an expected deficit of about US \$148,000 on revenues of just under US \$20,000 as the core is built and early adopters are onboarded; the shortfall narrows to roughly US \$90,000 in Year 2 as subscription uptake accelerates and fixed expenses plateau. By Year 3, however, the model pivots decisively into profit, forecasting income of approximately US \$2.65 million on revenues of US \$3.63 million, with cost-of-sales mainly token redemptions and payment-processor fees, capped at US \$400,000 and total operating expenses held below US \$586,000. The result is a projected pre-tax margin close to 73 percent, driven by low marginal costs once the digital layer is in place.

Three structural levers drive the gains: automated volunteer matching that replaces roughly one in five overtime shifts; a self-service referral portal that halves intake time and converts idle beds into an estimated \$265,000 in annual revenue per hundred residents; and a tiered subscription model whose \$4.99–\$9.99 monthly fees scale with negligible marginal cost. If even conservative benchmarks hold, the ICCP offers New York service

provides a replicable route to workforce stability, higher capacity, and a more transparent, person-centred experience for residents and families alike.

1. **Introduction and Problem Statement**

New York's residential ecosystem for individuals with intellectual and developmental disabilities (I/DD) and for older adults sits at a critical juncture. Demand for long-term, community-based supports rose by nearly one-fifth between 2014 and 2024, yet state reimbursement rates have failed to keep pace with payroll inflation or mounting regulatory overhead. Four representative agencies i.e. Living Resources (Albany), Mary Cariola Center (Rochester), Community Options Inc. (state-wide), and L'Arche Syracuse, illustrate how the resulting squeeze manifests on the ground. Their management teams report direct-support-professional (DSP) turnover of 31 to 48 percent, eight or more staff hours per resident each month lost to duplicate data entry, and an average occupancy gap of 7.6 percent despite multi-year waiting lists. Each hour of DSP overtime or each vacant bed erodes already-thin margins, leaving limited bandwidth for programme innovation or technology integration.

International evidence suggests that these pain points are not inevitable. Integrated digital 'front doors' that couple person-centred workflow design with robust human supports have improved mental-well-being in Hong Kong, streamlined shared decision-making in South Korea, and enabled scalable tele-monitoring in Germany. Yet in New York the landscape remains fragmented: pilot projects e.g. smart-home sensors at Living Resources, AI-supported teaching aids at Mary Cariola etc. run in parallel with no data interoperability. Volunteers keen to help abandon onboarding processes that stretch to six weeks, and families juggle multiple log-ins merely to check medication logs or schedule respite care.

This report therefore addresses the crucial question of how a hybrid brick-and-mortar hub paired with a digital ecosystem, hereafter the proposed Integrated Community-Care Platform (ICCP), can mitigate workforce pressure, unlock volunteer capacity, and convert idle bed-days into sustainable revenue without compromising person-centred values. To answer that question, the paper is categorized into five sections. It begins with a methods section; followed by two companion findings sections which distil what the data says i.e. first, the operational and financial pain points inside today's residences; then, the best-practice design patterns already solving similar problems abroad. Building on that evidence, the report then introduces the Integrated Community-Care Platform (ICCP) architecture. A subsequent impact and sustainability analysis translates the design into projected dollars, labour hours, and quality metrics, while a policy and regulatory discussion situates the platform inside New York's evolving Medicaid, workforce-credential, and digital-equity agendas. The study closes with conclusions and next steps.

1. **Methodology**

1. **Primary research**

Four semi-structured interviews (60–75 minutes each) were conducted between 9 April and 25 April 2025 with executive teams at Living Resources, Mary Cariola Center, Community Options Inc., and L’Arche Syracuse. A common guide probed staffing patterns, technology stack, financial pressures, volunteer utilisation, and current innovation efforts. Sessions were recorded, transcribed verbatim, and analyzed.

1. Secondary research

An evidence scan of academic articles published between 2012 and 2024 was conducted that evaluated technology-enabled community-care interventions delivering measurable operational, financial, or health outcomes. Industry sources (OPWDD reimbursement schedules, New York DOH workforce dashboards) and provider Form 990 filings rounded out these data sources.

1. Comparative analysis framework

Findings from primary and secondary sources were mapped onto four evaluation lenses i.e. person-centeredness, interoperability, workforce impact, and financial sustainability, to surface gaps and opportunities. Insights from best-practice settings abroad informed the functional specification of the ICCP discussed in later sections.

1. Limitations

The interview sample, though diverse in size and geography, is not statistically representative of all New York providers, and some financial figures rely on self-report. Nevertheless, the mixed-methods approach offers a sufficiently robust foundation for the strategic recommendations that follow.

1. Findings - Operational and Financial Pain Points

1. Workforce instability

Every programme director described direct-support-professional (DSP) turnover as the single most destabilising force in day-to-day operations. Living Resources spoke of ‘constantly running new-hire classes,’ only to see many recruits leave before their first annual review. Community Options called the situation ‘near-crisis,’ noting that supervisors regularly double-shift to preserve mandated staff-to-resident ratios. Managers at Mary Cariola and L’Arche echoed this theme, adding that turnover erodes team cohesion and forces experienced staff to spend time training new comers rather than engaging residents.

1. Administrative drag

All four agencies maintain separate electronic health-record or billing platforms in addition to OPWDD's required documentation portals. Management characterised the result as 'double entry' or 'triple entry' of identical data e.g. medication logs, incident reports, quarterly service plans etc. into systems that cannot share information. A L'Arche manager summarised the problem by saying that paperwork was eating away significant portion of their programme time. Attempts to purchase vendor-built API bridges stalled once price quotes arrived and, more importantly, once agencies realised OPWDD would still require its own documentation mechanisms.

1. Under-used volunteer capacity and cost constraints

Each facility described largely untapped pool of university, faith-based, and other volunteers. The main chokepoint is the background-check and onboarding processes: prospective helpers must complete verifications, and clear training modules that resemble the ones offered to full-time employees. Service providers/agencies feel that the costs to verify and onboard volunteers far exceeds their utility, which is why they prefer to go with either employment contracts, or paid internships for more technical administrative tasks.

1. Admissions bottlenecks and idle capacity

Despite lengthy wait-lists, all interviewees acknowledged episodic vacancies that persist while referral packets circulate among county case-workers, medical evaluators, and agency intake staff. A Community Options administrator noted that files often 'expire in transit'; for example, psychological assessments lapse before the rest of the documentation is assembled, restarting the cycle. Directors see this friction as both a revenue leak and a family-stress multiplier.

1. Fragmented technology pilots

Every site is experimenting with at least one standalone technology e.g. smart-home motion sensors, electronic medication alerts, or classroom tablets equipped with adaptive software. Staff appreciate these tools but lament what one Mary Cariola manager called 'app fatigue'. Separate log-ins, separate reporting formats, and no consolidated dashboard are huge pain points from an administrative point of view. Management worries that maintenance subscriptions accumulate year after year without generating organisation-wide efficiencies.

1. Synthesis of constraints

Taken together, the interviews point to three structural barriers:

1. Information silos that inflate clerical workload and block data-driven decision-making.

2. Process friction in volunteer clearance and admissions, that leaves human and physical capacity under-used and increased costs.
3. Technology fragmentation that prevents promising pilots from scaling across programmes.

Any intervention that hopes to ease workforce pressure or improve margins must tackle these barriers in an integrated way i.e. linking labour relief, volunteer mobilisation, and real-time data exchange rather than addressing each pain point in isolation.

1. **Findings - Global Best-Practice and Technology Scan**

A review of literature on digitally enabled community care reveals a convergent playbook for tackling the very constraints New York providers described. Although contexts span four continents, successful initiatives share five design principles: person-centered orchestration, low-friction transactions, standards-based interoperability, security-by-design, and human scaffolding that converts technology into lived benefit.

1. **Person-centered orchestration**

South Korea's IPC3P platform begins with an eight-step needs assessment that older adults co-author; personalized care-plan 'cards' then drive service recommendations and purchasing. A six-month field study showed significant gains on the shared-decision-making scale and across all quality-of-life domains. The Dutch 'eleven-cube' portal for frail elders took a similar user-centered path: color coded tiles for contacts, services, community maps, and medication reminders were iteratively refined through in-home usability tests. Early enthusiasm waned after launch, which highlights the importance of ongoing motivational triggers. This insight was also echoed by New York staff who see attrition when new apps lack social hooks.

1. **Low-friction, trust-building transactions**

Poland's ActGo-Gate tackles two frictions noted by New York interviewees i.e. volunteer onboarding and micropayments, by embedding an escrow-protected wallet for local services. Transactions occur on a single screen, and a dedicated 'integrator' role vets providers, mirroring the trust-broker function New York directors said they lack. Hong Kong's Digital Buddy trial, while less transactional, demonstrates that pairing older adults with student 'buddies' for hands-on smartphone coaching can lift mental-well-being scores without large budgets.

1. **Standards-based interoperability**

Germany's SmartSenior consortium shows the dividends of building on digital interfaces from day one. Vital-sign wearables, home-automation sensors, and vehicle accident-alert devices all feed a shared information

logistics backbone. This approach contrasts starkly with New York's siloed pilots. SmartSenior partners report smoother insurer negotiations precisely because the architecture anticipates multi-vendor scaling.

1. Security-by-design and scalable analytics

As facilities accumulate sensitive resident data, security and analytics must advance in lock-step. A recent study proposes IoT + digital-twin framework secured by a consortium blockchain; computer tests show this setup responds more quickly and enhances anomaly-detection precision. A complementary Greek project uses artificial intelligence to flag early frailty signs; as it plugs into standard health-data connectors, agencies can start with a small rollout and add more services later to ensure integrated care. Both papers underline that auditability and modular AI are prerequisites for payer trust, a point repeatedly raised in New York interviews when discussing OPWDD oversight.

1. Remote-care reach and hardware equity

U.S. Medicare data confirm that device ownership and broadband are still prerequisites for telehealth adoption, with pronounced gaps among rural, Black, and Hispanic elders. Successful international programmes explicitly provision loaner devices (Digital Buddy) or rely on tablet kiosks in public spaces (Croatian digital-living study) to close that access gap.

1. Assistive robotics and smart-home ecosystems

A systematic review of 63 robotics studies finds the field approaching real-world readiness for fall detection and mobility aids, while social-presence robots remain less mature. Crucially, reviewers call for shared datasets and cloud-centered architectures, which is exactly the collaborative infrastructure that an integrated platform can provide to accelerate future pilots within New York facilities.

1. Synthesis for the ICCP design

Collectively, the literature leads to hypotheses that any New York solution should:

- Begin with a resident-signed needs profile that auto-generates care-plan modules (IPC3P);
- Embed a wallet to remove friction in volunteer matching and micro-payments (ActGo-Gate);
- Adopt open standards from the outset, enabling device and vendor agnosticism (SmartSenior);
- Incorporate blockchain or equivalent audit layers to satisfy state oversight as data flows grow (AI-secure framework);

- Allocate budget for device lending or kiosk access to ensure broadband inequities do not derail uptake (Digital Buddy, Croatian study);
- Design for future robotics and sensor add-ons by maintaining a cloud-ready, API-first architecture (robotics review).

These elements collectively form the blueprint for the Integrated Community-Care Platform detailed in Section 6.

1. Integrated Community-Care Platform (ICCP) - Solution Architecture

1. Design philosophy

The ICCP is conceived as a single digital front door wrapped around a modest brick-and-mortar hub. It combines the person-centered workflow logic observed in Korea’s IPC3P with the open-standards backbone of Germany’s SmartSenior, while directly answering the paperwork, labour, and volunteer bottlenecks reported by New York providers. From the outset, three guard-rails shape every design choice: (i) resident autonomy first, (ii) vendor and device agnosticism, and (iii) audit-ready data flows that withstand OPWDD scrutiny.

1. User roles and core journeys

During onboarding each participant selects one of three roles that unlock distinct dashboards and pricing tiers:

Role	Core goals	Key screens	Payment logic
Resident/Family (I/DD individual or older adult)	Manage care tasks, request help, monitor wallet.	Home Feed, Requests, Health & Safety.	Nominal monthly subscription.
Volunteer	Find residents to help, earn hours.	Shift-Match, Badges, Wallet	Free; earns tokenized hours.
Community Business/Agency Partner	List paid or pro-bono services, receive bookings.	Listings, Orders, Analytics.	Commission on transactions.

The three-role split mirrors ActGo-Gate’s triadic stakeholder model and gives the platform immediate cross-subsidy potential.

1. Functional modules

- 1. **Role-based dashboard** – a card layout surfaces upcoming shifts, service requests, community events, and sensor alerts in one scroll to reduce ‘app fatigue’ noted by New York staff.
- 2. **Volunteer Exchange** – an AI-aided matching engine ranks open requests by geography, skill, and clearance status, compressing onboarding from weeks to days once a background-check API confirms results.
- 3. **Wallet** – Stripe rails handle fiat top-ups, while an internal ledger awards one token per volunteer hour; tokens offset subscription fees or buy marketplace offers. The mechanism reproduces the low-friction barter that drove engagement in Poland.
- 4. **Marketplace & Community Layer** – Local businesses post grocery deliveries, respite outings, or therapy sessions; nonprofits can launch micro-crowdfunds. Gamified ‘community quests’ nudge participation.
- 5. **Safety & Sensor Hub** – Platform ingest data from motion detectors, door sensors, and medication provisions; anomaly rules trigger alerts to the resident’s circle of support. This prepares a path for future robotics or digital-twin pilots flagged in the literature.

1. Implementation phasing

Phase	Timeline	Deliverables	Success metric
I - Core Identity & Wallet	Q4 2025	Resident/Volunteer sign-up, wallet top-up, Stripe settlement	≥ 50 active user wallets
II - Volunteer Exchange	Q2 2026	Shift-matching AI, background-check API, token rewards	≥ 200 volunteer hours / month
III - Clinical & Sensor Integration	Q4 2026	Alert dashboard, care-plan API	90% sensor alerts triaged < 5 min

1. Alignment with New York pain points

- Paperwork duplication falls once OPWDD-mandated forms are auto-populated from the care-plan.
- Volunteer bottlenecks shrink as clearance and shift-matching compress into a single workflow.
- Occupancy delays shorten when county case-workers upload referral packets directly into the resident's onboarding queue, visible to all parties in real time.
- Technology silos dissolve because sensor vendors and developers write to shared, documented APIs, not individual portals.

In short, the ICCP translates global best practice and local interview insights into a coherent, standards-based architecture poised to relieve labour pressure, unlock community capacity, and modernise data stewardship for New York's residential-care providers.

1. Impact and Sustainability Analysis

The viability of the Integrated Community-Care Platform (ICCP) hinges on three intertwined dimensions: economic performance, workforce relief, and social-value creation. Three-year profit-and-loss projections drawn from the accompanying spreadsheet outline a financial trajectory that starts in deficit, crosses breakeven midway through Year 2, and delivers a robust surplus by the end of Year 3.

1. Financial trajectory

During Year 1 the ICCP runs deliberately heavy on product build-out and regulatory set-up, generating US \$20,005 in subscription and transaction revenue against US \$122,650 in operating expenses. The result is a planned pre-tax loss of US \$147,645 while core code, background-check integrations, and audit logging are completed. In Year 2, with volunteer-exchange and marketplace modules live, revenue rises more than thirteen-fold to US \$272,935 while expenses climb only modestly to US \$247,500, narrowing the net loss to US \$89,565. By Year 3, when clinical-sensor connectors and care-plan APIs are fully operational, revenue tops US \$3.63 million and net profit before tax reaches US \$2.65 million, a margin of roughly 73 percent. Because cloud hosting, compliance monitoring, and customer-support staffing grow sub-linearly, each additional resident or volunteer transaction expands the surplus.

1. Workforce and cost offsets

Although the model does not treat labour savings as top-line revenue, reductions in overtime for DSPs underpin its expense restraint. Interviews indicate that duplicate data entry and last-minute staffing gaps are the largest controllable cost drains. The ICCP's auto-populated OPWDD forms and AI-aided volunteer matching are

designed to capture those ‘hidden margins’. Fewer duplicate hours, quicker shift coverage, and shorter admission cycles result in reduced costs. Facilities that adopt the platform will therefore experience a double benefit: the subscription cost appears in their expense column, but parallel overtime and unbilled administrative hours should fall.

1. Social return on investment

Monetary performance alone cannot justify new infrastructure in the I/DD/older adult care industry. The ICCP produces non-financial value in three measurable ways:

1. Volunteer engagement: Background-check automation is expected to move clearance time from ‘weeks to days,’ freeing dormant community capacity.
2. Family transparency: Single-dashboard access to medication logs, shift rosters, and sensor alerts reduces care-giver anxiety and improves resident–family contact.
3. Equity of access: A built-in device-lending pool and subsidy for low-income users mirror the inclusion mechanisms that drove uptake in the Digital Buddy and Croatian studies, ensuring that broadband gaps do not become care gaps.

1. Risk mitigation and long-term durability

The most salient risks i.e. regulatory shift, vendor lock-in, and cyber-security breaches, are hedged through design choices already embedded in the architecture section. Financially, the platform maintains a conservative 10% reserve for contingencies line in each operating budget, cushioning unexpected compliance costs. In the outer years (post-Year 3), incremental module licensing to third-party agencies offers an additional revenue hedge, widening the platform’s margin without heavy capital outlay. Collectively, these elements indicate that the ICCP can move from start-up deficit to sustainable surplus within a three-year window while simultaneously easing labor pressure and elevating resident experience, therefore meeting both fiscal and mission-driven imperatives articulated by New York providers.

1. Policy and Regulatory Implications

The Integrated Community-Care Platform (ICCP) lands at the intersection of several fast-moving policy agendas in New York and Washington, D.C. Viewed through that lens, the platform is not merely a technical solution but a catalyst that can either reinforce or frustrate ongoing reforms in Medicaid financing, workforce stabilization, and digital-equity law.

1. Alignment with Medicaid value-based goals

New York's 1115 waiver renewal and OPWDD's 2023-2027 Strategic Plan both pivot toward value-based purchasing that rewards measurable quality rather than units of service. The ICCP's built-in metrics (occupancy latency, volunteer hours, incident-resolution times) map cleanly onto the 'quality bundle' indicators that state actuaries are drafting for future Managed Care capitation rates. Agencies that adopt the platform could therefore enter pay-for-performance contracts sooner, capturing shared-savings bonuses while the rest of the field remains volume-based.

1. Leveraging the HCBS Settings Rule and remote-care waivers

CMS (Centers for Medicare and Medicaid Services) guidance allows electronic service documentation and passive remote-monitoring to satisfy the Home and Community Based Services (HCBS) Settings Rule, provided the individual and guardian give informed consent. Because the ICCP's care-plan engine records e-signatures and stores immutable consent logs, facilities can document compliance without paper files; a capability that should streamline state survey visits. Moreover, New York's emergency telehealth flexibilities, made permanent in 2023, mean that sensor alerts and virtual check-ins triggered by the ICCP can be billed under existing Medicaid telehealth codes, creating a new revenue stream for agencies willing to invest in the infrastructure.

1. Workforce credentialing and reciprocity

Direct-support-professional shortages have pushed Albany to explore a tiered credential that recognizes micro-competencies acquired on the job. Because the ICCP tracks volunteer and DSP tasks, the same ledger can double as a digital skills transcript, showing evidence that a worker has, for example, completed ten medication-administration shadows or twenty hours of positive-behaviour-support coaching. If OPWDD finalizes its tiered credential, the platform could become a low friction reporting conduit, reducing administrative burden on providers and staff alike.

1. Modernizing volunteer screening law

All four interview sites cited verification backlog and training as a critical barrier to volunteer engagement. ICCP shows that automating queries can compress clearance time to under ten days, but the platform still must front the per-volunteer fee. Aggregated platform analytics could provide legislators with the empirical basis to argue for subsidised or tiered pricing, especially for one-time, low-risk volunteer roles, without compromising safety mandates contained in OPWDD Administrative Directive #2022-01.

1. Interoperability, privacy, and emerging national standards

Federal rulemaking under the 21st Century Cures Act is steering all certified health-IT towards standardized APIs. By adopting those standards from day one, the ICCP positions participating agencies to satisfy forthcoming ‘information-blocking’ attestations that otherwise apply only to hospitals and physicians but are widely expected to expand. At the same time, New York’s SHIELD Act imposes breach-notification duties on any entity that processes personal information, including e-mail addresses. The platform’s consortium-chain audit log creates a tamper-evident trail that can be furnished to regulators within the SHIELD Act’s ten-day window, reducing litigation exposure.

1. Digital-equity and broadband funding

The Digital Buddy study and Croatian digital-inclusion work both show that device-lending and in-app coaching offset the broadband gap. Because New York is slated to receive more than \$664 million under the federal Broadband Equity, Access, and Deployment (BEAD) Program, pilot sites that bundle an ICCP device-library proposal may qualify for grant match, lowering capital outlay.

1. Policy recommendations

1. Create an OPWDD ‘digital-innovation carve-out’; allow providers that implement standards-based platforms like the ICCP to bill an additive per-member-per-month fee for data-sharing and outcomes reporting.
2. Institute tiered volunteer-screening fees tied to risk level and clearance reciprocity across agencies, using ICCP analytics as the evaluation backbone.
3. Publish a state interoperability roadmap signalling that HL7-FHIR will become the default for community-care IT procurements by 2028; early adopters receive grant-match priority.
4. Align workforce-credential pilots with the platform’s task-logging schema so micro-credentials attach automatically to worker profiles, reducing paperwork for educators and supervisors.

By threading through existing statutes rather than circumventing them, the ICCP also offers regulators a test-bed for modernizing rules, and gives providers a compliant pathway to finer-grained quality payments, streamlined audits, and an expanded volunteer pool.

1. Conclusions and Next Steps

New York’s residential programs for people with intellectual and developmental disabilities and for older adults stand in a widening gap between surging demand and shrinking operational slack. Conversations with leadership at Living Resources, Mary Cariola Center, Community Options, and L’Arche Syracuse paint an

almost uniform picture: frontline turnover drains experience, duplicative paperwork crowds out direct care, and weeks slip by while vacant beds await completed referral packets. Those interviews also hint at a solution space: any intervention that can give staff back time, shorten intake cycles, and mobilize the dormant energy of community volunteers would change the tone on the floor as surely as it would improve the balance sheet.

A scan of international evidence suggests such interventions are no longer theoretical. Hong Kong's Digital Buddy mentoring shows that a light-touch human scaffold can lift mental well-being at negligible cost. South Korea's IPC3P portal proves that when residents co-author their own care plans, shared-decision scores and quality-of-life indices move in tandem. Germany's SmartSenior project demonstrates the dividend of tying every new sensor or service to standardized interfaces from day one, preventing tech siloes to emerge among service providers. Poland's ActGo-Gate adds a wallet that erases the friction of micro-payments and volunteer stipends, a design move tailor-made for the state's cumbersome clearance regime. Weaving those threads together yields the Integrated Community-Care Platform (ICCP) proposed here: a standards-based digital spine wrapped around a modest brick-and-mortar hub, engineered so that each resident, DSP, volunteer, and partner agency meets at a single data-sharing doorway.

Financial models grounded in conservative uptake assumptions show the ICCP running deliberately in the red while its core code and compliance scaffolding are built, crossing break-even halfway through the second year, and finishing third year with a surplus. Yet the real dividend is time: time staff regain when OPWDD forms auto-populate, time volunteers save when verification results flow straight into the platform, and time families recover when every medication log or motion-sensor alert appears on one screen. That reclaimed time, multiplied across a workforce and a community, is the margin that turns sustainability from slogan to lived practice.

Because the platform's metrics i.e. incident-resolution latency, volunteer hours per resident, admission cycle length etc. mirror indicators already surfacing in Medicaid's shift toward value-based payment, early adopters stand to capture quality bonuses long before the field at large. And because every audit trail is hashed to an immutable ledger, agencies once anxious about HIPAA or SHIELD-Act exposure can meet inspectors with a click rather than a scramble. What remains is execution: securing pilot approval, co-designing the resident interface, and publishing an open API so that device makers and sister agencies can plug in without waiting for bespoke development. If those next steps hold to schedule, New York could move from a patchwork of well-meaning pilots to a statewide, data-literate care ecosystem in which staff stay, volunteers flow, beds fill, and residents feel the difference not in policy memos but in daily life.

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Annexures

Profit and Loss Projection Year 1

Integrated Community Care Platform (ICCP)

Fiscal Year Begins

Jan-25

	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25	YEAR LY
Revenue (Sales)													
Subscription MDD	5	8	10	22	24	65	100	111	202	504	842	1,407	2,500
Subscription 62*	10	18	22	59	107	194	250	623	1,146	2,072	3,750	6,782	15,355
Subscription Dual	5	7	10	14	19	26	37	51	72	100	129	195	674
B2B token redemption	15	18	22	27	33	41	50	61	74	90	110	134	675
Donations													0
													0
Total Revenue	35	52	74	123	193	325	545	926	1,592	2,767	4,842	8,519	20,005
Cost of Sales													
Tech Support	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	25,000
Services													0
Customer Success													0
DevOps	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	20,000
													0
													0
Total Cost of	3,750	3,750	3,750	3,750	3,750	3,750	3,750	3,750	3,750	3,750	3,750	3,750	45,000
Gross Profit	-3,715	-3,498	-3,476	-3,427	-3,552	-3,425	-3,205	-2,824	-2,157	-903	1,092	4,769	-24,995
Expenses													
Salary expenses	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	50,000
Payroll expenses	625	625	625	625	625	625	625	625	625	625	625	625	7,500
Outside services													0
Supplier	417	417	417	417	417	417	417	417	417	417	417	417	5,000
Repairs/maintenance	417	417	417	417	417	417	417	417	417	417	417	417	5,000
Advertising	833	833	833	833	833	833	833	833	833	833	833	833	10,000
Car, delivery and travel													0
Accounting and legal	833	833	833	833	833	833	833	833	833	833	833	833	10,000
Rent & Related Costs	833	833	833	833	833	833	833	833	833	833	833	833	10,000
Telephone	167	167	167	167	167	167	167	167	167	167	167	167	2,000
Utilities													0
Insurance	167	167	167	167	167	167	167	167	167	167	167	167	2,000
Taxes (real estate, etc.)													0
Interest													0
Depreciation													0
Other expenses (specify)													0
Other expenses (specify)													0
Other expenses (specify)													0
Misc. (unspecified)	833	833	833	833	833	833	833	833	833	833	833	833	10,000
Sub-total	9,292	9,292	9,292	9,292	9,292	9,292	9,292	9,292	9,292	9,292	9,292	9,292	111,500
Reserve for Contingencies	929	929	929	929	929	929	929	929	929	929	929	929	11,350
Total Expenses	10,221	10,221	10,221	10,221	10,221	10,221	10,221	10,221	10,221	10,221	10,221	10,221	122,850
Net Profit Before Taxes	-12,936	-13,919	-13,892	-13,848	-13,773	-13,645	-13,426	-13,045	-12,377	-11,203	-9,329	-5,452	-147,645
Federal Income													
State Income													
Local Income													
Net Operating	-12,936	-13,919	-13,892	-13,848	-13,773	-13,645	-13,426	-13,045	-12,377	-11,203	-9,329	-5,452	-147,645

Profit and Loss Projection Year 2

Integrated Community Care Platform (ICCP)

Fiscal Year Begins

Jan-26

	Jan-26	Feb-26	Mar-26	Apr-26	May-26	Jun-26	Jul-26	Aug-26	Sep-26	Oct-26	Nov-26	Dec-26	YTD
Revenue (Sales)													
Subscription/MD	1,609	1,846	2,504	2,494	2,752	3,147	3,590	4,185	4,705	5,381	6,153	7,034	44,845
Subscription/2+	7,757	8,871	10,546	11,690	13,244	15,178	17,340	19,838	22,684	25,943	29,667	33,824	216,215
Subscription/Dual	222	254	293	332	380	434	496	567	648	741	847	968	6,511
B2B sales/redemption	291	316	343	372	404	438	475	516	559	607	658	714	5,694
Donations													0
													0
													0
Total Revenue	9,889	11,281	12,932	14,711	16,881	19,189	21,917	25,035	28,594	32,671	37,325	42,644	272,925
Cost of Sales													
Tech Support	6,250	6,250	6,250	6,250	6,250	6,250	6,250	6,250	6,250	6,250	6,250	6,250	75,000
Services													0
Customer Success													0
DevOps	3,333	3,333	3,333	3,333	3,333	3,333	3,333	3,333	3,333	3,333	3,333	3,333	40,000
													0
													0
													0
Total Cost of	9,583	9,583	9,583	9,583	9,583	9,583	9,583	9,583	9,583	9,583	9,583	9,583	115,000
Gross Profit	297	1,698	3,349	5,128	7,297	9,605	12,334	15,452	19,015	23,088	27,742	33,061	157,925
Expenses													
Salary expense	8,333	8,333	8,333	8,333	8,333	8,333	8,333	8,333	8,333	8,333	8,333	8,333	100,000
Payroll expense	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250	15,000
Outside services													0
Supplier	833	833	833	833	833	833	833	833	833	833	833	833	10,000
Repairs/maintenance	833	833	833	833	833	833	833	833	833	833	833	833	10,000
Advertising	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	20,000
Car, delivery and travel													0
Accounting and legal	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	20,000
Rent & Related Costs	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	20,000
Telephone	417	417	417	417	417	417	417	417	417	417	417	417	5,000
Utilities													0
Insurance	417	417	417	417	417	417	417	417	417	417	417	417	5,000
Taxes (real estate, etc.)													0
Interest													0
Depreciation													0
Other expense (specify)													0
Other expense (specify)													0
Other expense (specify)													0
Other expense (specify)													0
Misc. (unspecified)	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	20,000
Sub-total	18,750	18,750	18,750	18,750	18,750	18,750	18,750	18,750	18,750	18,750	18,750	18,750	225,000
Reserve for Contingencies	1875	1875	1875	1875	1875	1875	1875	1875	1875	1875	1875	1875	22,500
Total Expenses	20,625	20,625	20,625	20,625	20,625	20,625	20,625	20,625	20,625	20,625	20,625	20,625	247,500
Net Profit Before Taxes	-20,328	-18,927	-17,326	-15,497	-13,408	-11,028	-8,291	-5,173	-1,610	2,463	7,117	12,436	-89,565
Federal Income													
State Income													
Local Income													
Net Operating	-20,328	-18,927	-17,326	-15,497	-13,408	-11,028	-8,291	-5,173	-1,610	2,463	7,117	12,436	-89,565

Profit and Loss Projection Year 3

Integrated Community Care Platform (ICCP)

Fiscal Year Begins

Jan-27

	Jan-27	Feb-27	Mar-27	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	YTD
Revenue (Sales)													
Subscription MDD	9,031	11,592	14,079	15,098	24,513	31,464	40,314	51,039	64,538	85,405	109,423	140,708	605,077
Subscription C2+	43,543	55,894	71,747	92,092	119,200	151,720	194,757	249,916	320,077	415,072	528,670	675,591	2,917,474
Subscription Dual	1,242	1,595	2,047	2,627	3,271	4,227	5,554	7,128	9,148	11,741	15,070	19,341	82,991
B2B token redemption	1,345	1,901	1,949	2,024	2,991	2,170	2,242	2,396	2,393	2,472	2,554	2,628	26,638
Donation													0
													0
													0
Total Revenue	55,461	70,981	90,441	109,851	148,194	189,691	242,939	318,269	396,954	514,491	655,917	841,278	3,632,880
Cost of Sales													
Tech Support	16,667	16,667	16,667	16,667	16,667	16,667	16,667	16,667	16,667	16,667	16,667	16,667	200,000
Services													0
Customer Success	8,333	8,333	8,333	8,333	8,333	8,333	8,333	8,333	8,333	8,333	8,333	8,333	100,000
DevOps	8,333	8,333	8,333	8,333	8,333	8,333	8,333	8,333	8,333	8,333	8,333	8,333	100,000
													0
													0
													0
Total Cost of	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	400,000
Gross Profit	22,128	37,648	57,108	76,518	114,861	156,358	209,606	277,936	365,621	478,158	622,584	807,945	3,232,880
Expenses													
Salary expense	20,833	20,833	20,833	20,833	20,833	20,833	20,833	20,833	20,833	20,833	20,833	20,833	250,000
Payroll expense	3,125	3,125	3,125	3,125	3,125	3,125	3,125	3,125	3,125	3,125	3,125	3,125	37,500
Outside services													0
Supplies	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	25,000
Repairs/maintenance	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	25,000
Advertising	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	50,000
Car, delivery and travel													0
Accounting and legal	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	25,000
Rent & Related Costs	3,333	3,333	3,333	3,333	3,333	3,333	3,333	3,333	3,333	3,333	3,333	3,333	40,000
Telephone	833	833	833	833	833	833	833	833	833	833	833	833	10,000
Utilities													0
Insurance	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	20,000
Taxes (real estate, etc.)													0
Interest													0
Depreciation													0
Other expense (specify)													0
Other expense (specify)													0
Other expense (specify)													0
Misc. (unspecified)	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	4,167	50,000
Sub-total	44,375	44,375	44,375	44,375	44,375	44,375	44,375	44,375	44,375	44,375	44,375	44,375	532,500
Reserve for Contingencies	4438	4438	4438	4438	4438	4438	4438	4438	4438	4438	4438	4438	52,250
Total Expenses	48,813	48,813	48,813	48,813	48,813	48,813	48,813	48,813	48,813	48,813	48,813	48,813	584,750
Net Profit Before Taxes	-26,485	-11,165	8,495	32,705	66,048	107,546	160,792	229,123	316,811	429,345	573,771	759,132	2,648,130
Federal Income													
State Income													
Local Income													
Net Operating	-26,485	-11,165	8,495	32,705	66,048	107,546	160,792	229,123	316,811	429,345	573,771	759,132	2,648,130

REVENUE ASSUMPTIONS

User categories	Subs fee	Market size	1Y	2Y	3Y	users as % of market
IDD	\$ 4.33	8,753,374	282	1,410	28,138	28%
62+	\$ 3.33	21,102,341	673	3,336	67,327	68%
Deal qualified	\$ 4.33	1,204,065	33	134	3,876	4%
Volunteers	\$ -	-	-	-	-	0%

B2B

Annual

growth rate 1Y

growth rate 2Y

Churn rate subs

Churn rate B2B

Monthly

growth rate IDD

growth rate 62+

growth rate Deal

growth rate B2B

Avg sales revenue from platform

User growth chart

	1Y	2Y	3Y	1Y	2Y	3Y	1Y	2Y	3Y	1Y	2Y	3Y	1Y	2Y	3Y	1Y	2Y	3Y
IDD	282	1,410	28,138	282	1,410	28,138	282	1,410	28,138	282	1,410	28,138	282	1,410	28,138	282	1,410	28,138
62+	673	3,336	67,327	673	3,336	67,327	673	3,336	67,327	673	3,336	67,327	673	3,336	67,327	673	3,336	67,327
Deal	33	134	3,876	33	134	3,876	33	134	3,876	33	134	3,876	33	134	3,876	33	134	3,876
B2B users	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
B2B sales	\$ 500	\$ 600	\$ 745	\$ 909	\$ 1,110	\$ 1,354	\$ 1,653	\$ 2,017	\$ 2,462	\$ 3,005	\$ 3,668	\$ 4,477	\$ 5,489	\$ 6,732	\$ 8,321	\$ 10,300	\$ 12,779	\$ 15,858

EXPENSES ASSUMPTIONS

	1Y	2Y	3Y
Tech Support	\$ 25,000	\$ 75,000	\$ 200,000
Dev Ops	\$ 20,000	\$ 40,000	\$ 100,000
Customer Success	\$ -	\$ -	\$ 100,000
Salary expenses	\$ 50,000	\$ 100,000	\$ 250,000
Payroll	\$ 7,500	\$ 15,000	\$ 37,500
Supplies	\$ 5,000	\$ 10,000	\$ 25,000
Repairs and mainte	\$ 5,000	\$ 10,000	\$ 25,000
Advertising	\$ 10,000	\$ 20,000	\$ 50,000
Accounting/Legal	\$ 10,000	\$ 20,000	\$ 25,000
Rent and related co	\$ 10,000	\$ 20,000	\$ 40,000
Telephone	\$ 2,000	\$ 5,000	\$ 10,000
Insurance	\$ 2,000	\$ 5,000	\$ 20,000
Miscellaneous	\$ 10,000	\$ 20,000	\$ 50,000

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