



Using Digital Tools for Better Health Outcomes

Digital Tools Are Part of a Comprehensive Program

Digital Health Augments Coordinated Care

Healthcare delivery professionals, including physicians, nurses, and therapists generally agree that coordinated care provides optimal care versus individual specialty and modalities that deliver services independent of each other. A coordinated team, with proper communication, is needed to accomplish the better outcomes and improvements in care delivery promised from coordinated care delivery.¹

Digital health tools are increasingly available to care teams but are often thought of as ‘the solution’ without enough consideration that those tools, deployed without coordination with delivery of clinical and community services, provide individuals with sub optimal results. Digital health should be viewed as a key piece in the mosaic of domains that deliver care and services and should be fully integrated with all parties that deliver those services. The power of digital health lies within its ability to enhance coordination, inform all parties, collect data, and assist in communication and connections.

Digital Health is Changing the Delivery Landscape

Digital health is entering the mainstream for a variety of healthcare diagnostic and treatment options. Current capabilities in the digital health range include handheld (smart phone) mental health support tools, telehealth consultation expansion, ongoing glucose level monitoring and medication dispensation, and remote patient monitoring. On the horizon, through the acceleration of Artificial Intelligence (AI) powered applications, technology will help to improve medical imaging for screenings, precision medicine, and risk assessment as well as provide input into diagnostic decisions. Digital health tools provide capabilities which can enable care coordinators and licensed clinicians to reach more patients while experiencing less stress.

Optimal support structures will not just include digital health tools injected into existing delivery framework but will include a coordinated care approach developed from the ground up to take advantage of every domain to support individual promises to create a better range of outcomes, similar to coordinated care across specialties - a recognized improvement over individual practice delivery for a variety of patient cohorts.² One espoused definition of

¹ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6359857/>

² <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2712183>

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coordinated care is the practices of: Access to care, Evaluation, Diagnostic, Care Plan & Education, and Post Care/Follow-Up.³

With this kind of process-oriented definition, the delivery of coordinated care can be thought of as interweaving five domains of capability with digital and human efforts, all orchestrated to help the individual, as depicted in the figure below:

- **Clinical Delivery:** Clinicians provide oversight and direction based on the individual's conditions, needs, available treatment, and lifestyle options.
- **Skilled Delivery:** Delivery support professionals provide services to the individual including community, nutrition, and connectivity services. In many cases these actions provide support for the simple tasks of daily living (Activities of Daily Living (ADLs)) as well as more complex activities of daily living (Instrumental Activities of Daily Living (IADLs)).
- **Healthcare Measurement and Delivery Devices:** Medical devices and diagnostics, protocol, and available therapy option advancements provide technology support such as remote delivery of insulin.
- **Family/Connected Caregivers:** Family and other care giver support is an essential element for individuals who have those kinds of relationships. When communication is effective caregivers can help center, enrich, and assure coordination across all professional service delivery elements. The National Academy of Medicine (formerly the Institute of Medicine) and universities around the world continually publish research on family involvement, usually with a specialty or cohort focus, such as people in acute care situations.⁴ An Institute of Medicine semi-annual report from 2008, "Crossing the Quality Chasm," however, makes the case for overall improvement in the health care system including family involvement.⁵



³ <https://catalyst.nejm.org/doi/full/10.1056/CAT.18.0291>

⁴ <https://pubmed.ncbi.nlm.nih.gov/25370546/>

⁵ America, IoMCoQoHCi, and I. O. M. Staff. "Crossing the quality chasm: a new health system for the 21st century." (2001).

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- **Digital Health:** Digital Health IT provides a platform for communication and connectivity, care plan management and delivery, ongoing monitoring (including vital signs and home living condition), connection to a full Electronic Health Record from on-site support systems, visit coordination, information sharing across all parties, and connections for pharmacy and laboratory services (so gaps in medications and the latest results are promulgated to all who need to know and have access rights). In short, Digital health provides a wealth of enablement for all domains and capabilities to optimally support an individual. Digital health tools can be the catalyst to delivery care coordinated across the domains.

These support domains provide the most effective improvements in care overall. Digital health companies that ignore the need to interweave their products with other domains create gaps in service and outsized expectations from sales efforts can fall short.

Digital Health Tools Enable Delivering Coordinated Support

For individuals with challenging comorbidities to remain in residential settings (or for those who will be optimally cared for in group settings, such as nursing homes), all of these delivery elements must work in harmony, which all too often is not the case. Coordinating skills and services that may help an individual is challenging but presents a complete health picture to care coordinators; family care givers require data well beyond Electronic Health Record (EHR) data and scattered therapist notes. A holistic, fully integrated care delivery approach is possible, however, with digital health technology taking the lead to effectively coordinate activities, provide communication paths to all parties, gather critical data, alert care teams regarding significant health events, provide access to comprehensive data, and provide analytics capabilities supporting care decisions. For home settings, digital tools will help enable communications; for group settings, the severe staffing challenges require automation assistance to offset the loss of over 200,000 staff in the last three years.⁶

⁶ <https://www.ahcancal.org/News-and-Communications/Fact-Sheets/FactSheets/BLS%20JULY%202022%20JOBS%20REPORT.pdf>

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Thus, the implementation of digital technologies must be planned in coordination with other domains supporting care and coordination, and not ‘dropped in’ without connections to the continuum of care pre-planned. When digital health tools are properly integrated with all domains of support, they become a key lever to help deal with increasing healthcare cost issues and the need for broad improvement in outcomes.

