



REMOTE CARE DELIVERY: Transforming Healthcare and Long-Term Care to Meet 21st Century Aging Realities

Remote care delivery (RCD), which includes videoconferencing with healthcare providers, tablet-based patient education, and devices that can prompt and track diet, exercise and medication usage, creates benefits across the healthcare system. Research shows that RCD enhances quality of care; reduces healthcare costs to families, communities and society; increases earlier detection, diagnosis, and therefore treatment; and extends access to more immediate and effective healthcare. Through RCD, health can be more accurately monitored and care more efficiently delivered in the home and other locations outside of traditional settings with transformative impact on individuals and the healthcare system. In particular, the aging population—90 percent of which want to remain in their own homes as they age—stands to benefit as remote care provides a path for a healthier, more active and more empowered aging process.

While remote care should be a standard of care for the oldest patient population (80+), which has the most chronic conditions and multiple co-morbidities to address, it also has far-reaching value for the 45+ cohort as a tool for prevention and wellness.

The Global Coalition on Aging (GCOA) recognizes the growing body of evidence demonstrating that the integration of RCD as a valuable mode of healthcare delivery, including care itself, can lead to benefits for individuals, their families, communities and national healthcare systems. Remote patient monitoring (RPM), for example, can equip physicians, nurses, caregivers—both professional and family—with the tools to navigate and better understand each complex and unique health-

care situation with deeper and more objective insights into an individual's health. As a result, these insights can help lead to earlier detection and diagnosis and therefore earlier and more effective treatment and management of multiple conditions. For individuals, monitoring technology can provide prompts and reminders to help improve medication adherence and encourage healthier lifestyles.

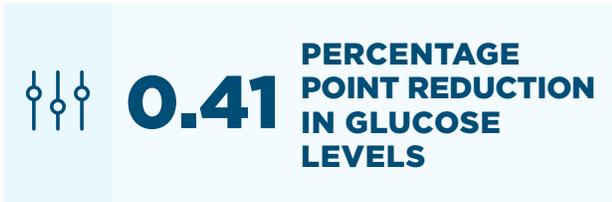
Working with a diverse and cross-sector group of stakeholders in the RCD ecosystem, GCOA urges providers, payers, researchers, patients, caregivers and advocates for healthy and active aging to adopt remote care delivery as a standard of care. Together, we can help transform our healthcare and long-term care systems through a more connected and smarter ecosystem that will save costs and improve quality of care.

Benefits of Remote Care Delivery for Our Aging Society

The new World Health Organization Strategy on Ageing and Health envisions 21st century healthcare in terms of maintaining individuals' functional ability, that is, the combination of one's physical and mental capacities, relevant environmental characteristics and the interactions between them. Simply put, health status—and particularly healthy aging—should be measured according to maintaining one's health and functioning rather than on treating disease. Effective remote care delivery can be a powerful tool for monitoring and maintaining functional ability and achieving healthy aging for all. The benefits include:

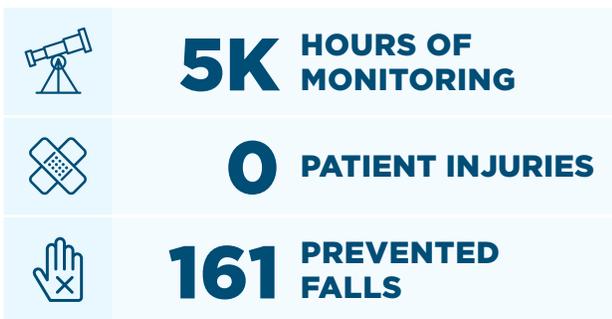
Effective remote care delivery can be a powerful tool for monitoring and maintaining functional ability and achieving healthy aging for all.

RCD engages patients in their own health management and better equips them and their caregivers to understand and follow care instructions.



For example, in a randomized clinical trial of type 2 diabetes patients, it was found that the intervention group receiving remote monitoring through telehealth had reduced glucose levels by an average of 0.41 percentage point more than the control group. The impact on family caregivers is equally as powerful. The Alberta study on virtual care management for congestive heart failure found that caregivers felt both an emotional and physical reduction in caregiver burden because of the virtual monitoring.²

RCD improves overall health outcomes through better-connected and more efficient care in traditional and non-traditional care settings.



Tests at Presence Health hospitals in Illinois used remote monitoring to detect signs of danger and prevent falls. Through this monitoring, the hospitals reported zero patient injury or adverse events over 5,000 hours of monitoring, including the prevention of 161 potential falls.³ An IDEATel study in which elderly diabetes patients were provided with a home telemedicine unit—the largest randomized controlled trial to evaluate telemedicine as means of providing home-based care to diabetes patients—resulted in net improvements in glucose, cholesterol and blood pressure levels over five years.⁴

RCD lowers healthcare costs for individuals and health systems by reducing or eliminating unnecessary, costly emergency room visits, physician visits, hospitalization and rehospitalization.



A meta-analysis of studies on remote patient monitoring of heart failure patients indicates that “remote monitoring programs reduced rates of admission to the hospital for chronic heart failure by 21%.”⁵ More broadly across the spectrum of chronic illnesses, a randomized control trial of more than 6,000 patients in the United Kingdom showed that “if used correctly telehealth can deliver a 15% reduction in A&E (accident and emergency) visits, a 20% reduction in emergency admissions, a 14% reduction in elective admissions, a 14% reduction in bed days.”⁶ Further, according to the U.S. Veterans Health Administration, remote care technologies can reduce hospitalizations by as much as 40% for some diseases, leading to annual savings of \$6,500 per patient.⁷

Barriers to Making RCD a Standard of Care

Today RCD is vastly underutilized and slow to be fully integrated across the healthcare continuum despite the substantial technology advances that make it an increasingly useful tool. Lack of knowledge about the many RCD tools available today and clear limits in public policy incentives and reimbursement strategies hinder widespread adoption. Nevertheless, at any given time, care providers around the world are using these technologies to detect, diagnose and treat a variety of conditions. Yet, it is commonplace that an individual provider organization will use remote care only for relatively small populations, such as those living in remote areas, and only in the treatment of a few conditions. This slow uptake represents a missed opportunity to deliver care more efficiently, foster innovation in healthcare and improve quality of life.

This slow uptake represents a missed opportunity to deliver care more efficiently, foster innovation in healthcare and improve quality of life.

GCOA's Position on Remote Care Delivery

Broader and accelerated usage of RCD as a standard of care for many more conditions and use cases will go a long way toward benefiting patients and other care recipients, as well as reducing costs across the health-care ecosystem as a whole. As patient needs continue to grow, wider adoption of RCD will enable individuals to more readily receive high-quality, affordable and accessible care.

GCOA calls for:

- **More comprehensive analyses on RCD's impact** on costs; quality of care; quality of life; medication adherence; early detection, diagnosis and intervention and, ultimately, return on investment;
- **Policymakers, the healthcare community and other influencers to critically evaluate the wide and growing body of evidence** showing that RCD is a “game changer” in achieving better overall care in terms of access, quality and cost;

- **Strategies and action on appropriate payer support structures** that recognize the value of RCD to the healthcare and long-term care systems as well as to the future of innovation in technology and healthcare;
- **Public and private payers to treat spending on RCD as an investment—not a cost**—that will enable more sustainable fiscal models and immensely improve care delivery for patients; and
- **RCD to become the standard of care** enabling prevention and wellness as well as earlier detection and diagnosis leading to more effective and proactive treatment.

GCOA is committed to collaborating with providers, policymakers, payers, researchers and all those who wish to realize the potential of healthy aging, to find the right mix of remote and hands-on care—and ensure delivery of the most high-quality, cost-efficient care for our growing aging population.

Endnotes

¹ Greenwood, D. A., Blozis, S. A., Young, H. M., Nesbitt, T. S., & Quinn, C. C. (2015). Overcoming Clinical Inertia: A Randomized Clinical Trial of a Telehealth Remote Monitoring Intervention Using Paired Glucose Testing in Adults With Type 2 Diabetes. *Journal of Medical Internet Research*, e178. doi:10.2196/jmir.4112

² Care Innovations. (2016). *Alberta Health Services: Clinical Outcomes*. Retrieved July 7, 2017, from Care Innovations: http://www.connectwithcare.org/wp-content/uploads/2017/06/2016_Outcomes_Clinical-1.pdf

³ Catholic Health Association of the United States. (2016, September 15). *Remote Sitter aims to lower fall risks while improving staffing efficiency: Publications*. Retrieved July 7, 2017, from <https://www.chausa.org/publications/catholic-health-world/archives/issues/september-15-2016/remote-sitter-aims-to-lower-fall-risks-while-improving-staffing-efficiency>

⁴ Shea, S., Weinstock, R. S., Teresi, J. A., Palmas, W., Starren, J., Cimino, J. J., . . . Kong, J. (2009). A Randomized Trial Comparing Telemedicine Case Management with Usual Care in Older, Ethnically Diverse, Medically Underserved Patients with Diabetes Mellitus: 5 Year Results of the IDEATEL Study. *Journal of the American Medical Informatics Association*, 446-456. doi:10.1197/jamia.M3157

⁵ Clark, R. A., Inglis, S. C., McAlister, F. A., Cleland, J. G., & Stewart, S. (2007). Telemonitoring or structured telephone support programmes for patients with chronic heart failure: systematic review and meta-analysis. *British Medical Journal*, 1-9. doi:10.1136/bmj.39156.536968.55

⁶ Steventon, A., Bardsley, M., Billings, J., Dixon, J., Doll, H., Hirani, S., . . . Newman, S. (2012). Effect of telehealth on use of secondary care and mortality: findings from the Whole System Demonstrator cluster randomised trial. *British Medical Journal*, 1-15. doi:10.1136/bmj.e3874

⁷ Darkins, A., Ryan, P., Kobb, R., Foster, L., Edmonson, E., Wakefield, B., & Lancaster, A. (2008). Care Coordination/Home Telehealth: The Systematic Implementation of Health Informatics, Home Telehealth, and Disease Management to Support the Care of Veteran Patients with Chronic Conditions. *Telemedicine and e-Health*, 1118-26. doi:10.1089/tmj.2008.0021Greenwood, D. A., Blozis, S. A., Young, H. M., Nesbitt, T. S., & Quinn, C. C. (2015). Overcoming Clinical Inertia: A Randomized Clinical Trial of a Telehealth Remote Monitoring Intervention Using Paired Glucose Testing in Adults With Type 2 Diabetes. *Journal of Medical Internet Research*, e178. doi:10.2196/jmir.4112

