



January 26, 2016

The Honorable Orrin Hatch
Chairman, Committee on Finance
U.S. Senate
Washington, DC 20510

The Honorable Ron Wyden
Ranking Member, Committee on Finance
U.S. Senate
Washington, DC 20510

The Honorable Johnny Isakson
U.S. Senate
Washington, DC 20510

The Honorable Mark Warner
U.S. Senate
Washington, DC 20510

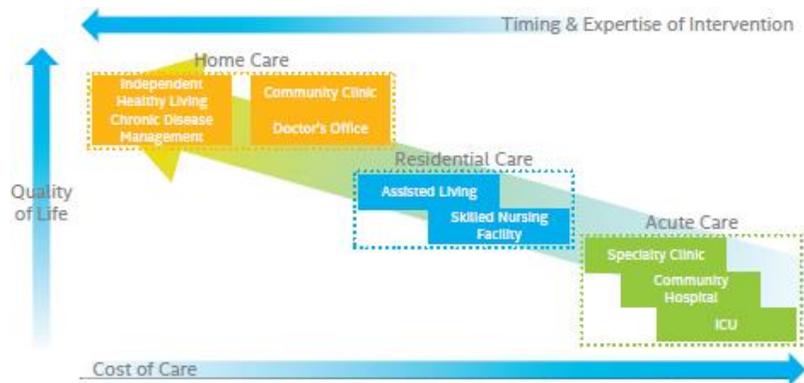
Dear Chairman Hatch, Ranking Member Wyden, Senators Isakson and Warner:

Intel Corporation supports the work of the Bipartisan Chronic Care Working Group to change care delivery and highlight the role of the home in providing professional, effective alternatives for patients with chronic disease. We thank the Senate Finance Committee and the working group leadership for developing the “Bipartisan Chronic Care Working Group Policy Options” discussion draft to transform delivery of chronic disease care.

Intel is known as a world leader in silicon innovation, but our company and our 500+ subsidiaries have also been active in the healthcare arena both directly and indirectly.¹ Our technologies help to power the Internet, the broadband connected world, and many health care institutions globally with whom we increasingly work to connect patients, families, providers, and healthcare researchers with one another. For more than a decade Intel has focused a portion of its research and development efforts specifically on healthcare to better understand how to connect all of the major players through a wide array of health information technologies. Intel social scientists, medical informaticists, clinicians, and engineers have studied more than 1,000 patient homes and 250 hospitals and clinics in more than 20 countries to inform the development of products and solutions that can help bring forth a connected world for health care.

Intel Strategy: “Shift Left” to distributed, personal health. Through this research, Intel pioneered the concept of “shift Left,” Place-shifting and Skill-shifting from expensive hospitals and specialty care to the

¹ Additional information about Intel is available at www.intel.com/healthcare.



home and community. In an era of doctor and nurse shortages, we also need to —skill shift, giving responsibility for some care traditionally delivered by doctors and nurses to community health workers, family members, and patients, who will need training in their new roles, and a way to connect with one another.

Hospital care is not only expensive, but can be un- safe for patients with iatrogenic complications, with adverse events being common. Previous literature has found that the Hospital at Home (HaH) model provides hospital-level care in the home as a substitute for acute hospital admission, and when compared with usual hospital care, is associated with better outcomes. Further, a meta-analysis of randomized, controlled trials of substitutive HaH use demonstrates a 38% reduction in mortality compared with usual hospital care. In a pilot study conducted at Advocate Christ Medical Center, a 695-bed community-based tertiary hospital in Oak Lawn, Illinois, results showed patients were more satisfied with their care in multiple domains and met illness-specific quality standards at similar rates to hospital comparison patients. Functional outcomes were notable for a trend toward improvements in activities of daily living among HaH patients. Compared with hospital patients at 90 days after discharge, HaH patients were less likely to experience a hospital readmission (adjusted odds ratio, 0.39; 95% CI, 0.21-0.72). This study tested the safety, feasibility, and efficacy of a scalable HaH that provided physician care via 2-way biometrically enhanced tele-video and cared for patients for a 34-day episode.²

The innovations point to both the value of the HaH model as well as the barriers to scaling similar programs. Although there is no payment for HaH in Medicare fee for service despite data from many randomized controlled trials showing care equivalency, we are hopeful that the changes needed for these services will be provided in future legislation. The model also showed that leveraging technology will be the key to cost savings.

1. Comments on Receiving High Quality Care in the Home Proposals:

Expanding the Independence at Home Model of Care: Intel has been a longtime supporter of the Independence at Home concept and pleased to see the impressive results from the first year of the pilot suggesting that this project is yielding very positive results, including savings of \$3,070 per beneficiary.

Intel has participated in projects on a national scale with the Veteran’s Administrations Home Based Primary Care Program, a precursor to Independence at Home (Edes et al. 2014). We have also worked locally with Home Care Providers, a Portland-based primary care delivery program. These projects underscore the importance of early identification of symptoms and clinical intervention to avoid hospitalization and improve patient quality of life.

² <http://www.ajmc.com/journals/issue/2015/2015-vol21-n10/scalable-hospital-at-home-with-virtual-physician-visits-pilot-study/P-5>, 2015, p. 1

We support the Committee's proposal to expand the current IAH demonstration into a nationwide program and urge the Committee to waive the 1834(m) telehealth restrictions from IAH care delivery. The IAH demonstration had, at its core, a requirement for digitally enabled interoperable use of information technology, telehealth and remote patient monitoring. CMS issued the following statement in the FAQ's³:

IAH A.11. What types of monitoring and diagnostic technology are practices required to use?
Practices are required to use remote monitoring and mobile diagnostic technology in order to provide timely monitoring and evaluation and to minimize trips to the emergency department or outpatient facilities that are difficult for the target population to reach. Practices may propose varying levels of monitoring and mobile diagnostic technology.

We would be interested to see the data from telehealth and RPM usage. Did the 1834(m) telehealth restrictions impede innovative and efficient use of telehealth enabled services? It is important to note that the IAH demonstration was modeled on the successful transformation demonstrated by the Veterans' Administration (VA), in which home based care is provided for those with multiple chronic conditions **using daily bio-physical monitoring of vital signs (remote patient monitoring)** in conjunction with care coordination. Daily monitoring and digitally enabled communication, offers a transformed delivery of care that reduces acute illness episodes, reduces chronic disease complications, and engages patients in self-care education.

We also suggest that expanding services beyond those patients who are homebound be considered since patient status varies through treatment and rehabilitation.

Expanding access to Home Hemodialysis Therapy: Intel supports the Committee's proposal to expand the originating sites for telehealth visits to include free-standing renal dialysis centers in any geographic location. We urge the Committee to expand permitted originating sites for home dialysis patients to include the home. We believe that the physician conducting the visit can and will determine the best in person visit schedule based on patient condition.

Additional Recommendation – Include the Wicker Schatz legislation.

Telemedicine and remote patient monitoring are important tools in addressing chronic disease, and we appreciate the inclusion of these technologies in several of the options proposed. However to fully optimize the benefits of RPM we ask the Committee to embrace and advance policies that permit use of RPM, not as a stand- alone intervention, but rather as a tool that permits delivery of personalized care to patients wherever they are.

We specifically ask the Committee to add a meaningful Remote Patient Monitoring benefit for Medicare beneficiaries through the current fee for service system and emerging alternative payment models. Senators Wicker and Schatz, along with Chairman Cochran, Chairman Thune and Senators Cardin and Warner have been working to develop a consensus approach to providing Medicare beneficiaries with access to telehealth and RPM in a bill titled the Clinical Opportunities for Novel and Necessary Effective Care Technologies (CONNECT) for Health Act. We and other key stakeholders that regularly convene through a coalition to discuss and develop thinking and consensus around telehealth and RPM issues

³ https://www.cms.gov/Medicare/Demonstration-Projects/DemoProjectsEvalRpts/downloads/IAH_FAQ.pdf
December 11, 2011.

believe that the CONNECT for Health Act represents a solid program to finally provide Medicare beneficiaries with access to these important technologies for better health. It is thoughtful and balanced legislation that will provide Medicare beneficiaries with two or more chronic diseases with access to telehealth and remote patient monitoring.

2. Comments on Proposals on Expanding Innovation and Technology

Intel supports the Bi-Partisan Chronic Care Working Group for the focus on using technology as an essential element of the plan to address both the growing number of patients suffering from diseases and the shortage of professionals to care for these patients. Two proof points we submit demonstrate the value of responding to this crisis through digital solutions.

Virtual Care Improves Quality & Reduces Costs

With funding from a federal Beacon Community grant, St. Vincent Health worked with Intel-GE Care Innovations™ to test a remote care management program designed to reduce readmissions. Findings of the study, which concluded in 2012, **show a 64% reduction in hospital readmissions** compared to the study control group. Through daily telemonitoring of patients' biometrics — blood pressure, body weight, and oxygen saturation — and periodic videoconferencing, patients and their nurses were able to recognize any "red flags" and help address health problems before they became serious enough to require re-hospitalization.

St. Vincent Health is a major hospital system in Indiana with 22 hospitals serving 47 counties. It is a member of Ascension Health, the nation's largest not-for-profit Catholic Healthcare System. With funding from a federal Beacon Community grant,⁴ St. Vincent Health worked with Intel-GE Care Innovations™ to test a remote care management program designed to reduce readmissions. Findings of the study, which concluded in 2012, show a 64% reduction in hospital readmissions compared to the study control group.

The St. Vincent/Intel-GE Care Innovations team targeted patients with congestive heart failure (CHF) and chronic obstructive pulmonary disease (COPD), working to develop clinical protocols and educational materials designed to help them stay away from the emergency room and out of the hospital post-discharge.

Using a remote care management program, patients with CHF and COPD were supported at home by a nurse via the Intel-GE Care Innovations™ Guide solution. Educational videos helped guide patients' everyday decisions regarding their health. Through daily telemonitoring of patients' biometrics — blood pressure, body weight, and oxygen saturation — as well as daily interactive questionnaires, and periodic videoconferencing, patients and their nurses were able to recognize any "red flags" and help address

health problems before they became serious enough to require re-hospitalization.

The Care Innovations™ Guide strengthened the connection between healthcare professionals and patients. This personal connection helps make disease management easier and helps patients actively participate in their own treatment. Positive reinforcement increases patient confidence, and reinforces behavior changes.

⁴ The \$220 million federal Beacon Community program, funded by the American Recovery and Reinvestment Act of 2009, seeks to advance a health IT infrastructure that will support the nationwide electronic exchange and use of health information. Awards were made in 2010 to 15 communities throughout the U.S. For more information, see <http://www.healthit.gov/policy-researchers-implementers/beacon-community-program>.

The Michael J. Fox Foundation for Parkinson's Research (MJFF) and Intel Corporation are collaborating on improving research and treatment for Parkinson's disease — a neurodegenerative brain disease second only to Alzheimer's in worldwide prevalence. The collaboration includes a multiphase research study using a new big data analytics platform that detects patterns in participant data collected from wearable technologies used to monitor symptoms. This effort is an important step in enabling researchers and physicians to measure progression of the disease, improve medication adherence and enable real time education to patients on how behavior impacts the disease.

With wearable technology, the potential to collect and analyze data from thousands of individuals on measurable features of Parkinson's, such as slowness of movement, tremors and sleep quality, could enable researchers to assemble a better picture of the clinical progression of Parkinson's and track its relationship to molecular changes. Wearables can unobtrusively gather and transmit objective, experiential data in real time, 24 hours a day, seven days a week. With this approach, researchers could go from looking at a very small number of data points and burdensome pencil-and-paper patient diaries collected sporadically to analyzing hundreds of readings per second from thousands of patients and attaining a critical mass of data to detect patterns and make new discoveries. It is a dramatic shift from data-poverty to data-wealth — and signals the future of research and discovery.

Recommendations:

1. Increasing Convenience for Medicare Advantage Enrollees through Telehealth:

Intel supports permitting MA plans to include telehealth services in its annual bid amount and urges that the permitted telehealth be broader than those services permitted under the traditional Medicare program. We strongly urge the Committee to also include remote patient monitoring in the annual bid amount.

- Intel supports the proposal to direct the Department of Health and Human Services (HHS) to waive the geographic component of the originating site requirements for ACOs. However, we believe the proposal should not be limited to Medicare Shared Savings Program (MSSPs) ACOs in two-sided risk models. ACOs in Track 1 that are trying to move to two-sided risk need support in investing in technology that will help them achieve the goal of risk sharing.
- Intel supports the proposal to give MSSP ACOs the flexibility to provide remote patient monitoring services where Medicare fee-for-service does not currently reimburse. We believe the ability to utilize connected care tools like remote monitoring reduces resource utilization by averting expensive hospital or urgent care visits. Again, we do not believe this proposal should be limited to two-sided risk ACOs.

2. Adopt provisions offered by Senators Wicker and Schatz.

Following are additions to your proposals, which are part of the Wicker/Schatz bill that we ask the Committee to:

- Reconsider excluding telemedicine as a substitute in network adequacy requirements for Medicare Advantage. Recently, the National Association of Insurance Commissioners (NAIC) agreed to include telemedicine in their Health Benefit Plan Network Access and Adequacy Model Act, a decision that will potentially have nationwide impact to patient coverage and access. We urge the Working Group to follow NAIC's model, and permit the use of telemedicine to meet applicable network standards.

- Add a meaningful Remote Patient Monitoring benefit for Medicare beneficiaries consistent with the bill proposed by Senators Wicker and Schatz. Under the proposal, patients with multiple chronic diseases and two inpatient hospitalizations in one year may receive remote monitoring services for 120 days.
- Include telehealth payment for Medicare beneficiaries who are not in Medicare Advantage. While policymakers across the spectrum want to move away from fee-for-service, there is a transition period in which fee-for-service will still be the dominant payment model in Medicare. Intel supports the move toward value based care, but recognizes the reality that without payment for telemedicine and remote monitoring in fee-for-service, its adoption will be stifled while transitioning to MACRA. There is ample evidence that both telehealth and remote monitoring can help avoid unnecessary use of health care services and improve patient satisfaction. However, providers, including physicians and hospital systems moving to two-sided risk, will not realize the full potential of telehealth and remote monitoring without an initial period of payment.
- In addition, we urge the Committee to explicitly permit MA plans to include remote patient monitoring for individuals with chronic diseases whenever the plan determines that clinical evidence supports its use. These services can be included in an MA plan's annual bid, at which time the evidence that supports the service can be cited.

3. Consider the role that whole genome testing can serve in chronic disease therapy

Insurers, including Medicare, are funding some genomic testing for specific chronic diseases— cancer, HIV, and heart disease—in patients and their families. This has significantly increased both predictive and preventative options. The transformation of health care from one-size-fits-all, trial-and-error medicine to a targeted approach utilizing an individual patient's molecular information continues to accelerate as the U.S. Food and Drug Administration (FDA) more regularly and rapidly approves new personalized medicines. More Than 25 Percent (13 of 45) of the Novel New Drugs Approved by FDA in 2015 are Personalized Medicines. However, the limits on reimbursement for whole genome testing limits the practice of precision medicine. As the Committee considers cost-saving policies that will transform healthcare delivery, genomic mapping will need to be one of the chief considerations to enable our healthcare practices to target and accelerate care. Expanding genetic testing can appear to increase CMS funding unless a comprehensive analysis is considered, including misallocated treatments, missed diagnosis of early stage disease, and the total costs of trial and error medicine.

Transformation of care provided to Medicare beneficiaries with chronic disease is desperately needed and we appreciate the Committee's work in proposing changes to the current Medicare payment and delivery structure that will ensure more personalized, but cost effective approaches. We are encouraged by the policy options document and look forward to continuing discussions on these important changes.

Sincerely,

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