Aging, Technology & Systems Innovations in Well-Being Across the Lifespan

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Before the New York City Council
October 28, 2011

Good morning it is indeed an honor to be invited to share my thoughts on aging, technology and innovating a better life tomorrow before the New York City Council. An honor for anyone, but particularly a privilege for me as my childhood was formed by my mother’s enduring love for the City visiting relatives in Queens, friends in Brooklyn, a bakery or two in the Bronx, an occasional Staten Island ferry ride always concluded with lighting a candle at St. Patrick’s.

Let me begin with the story that inspired the beginnings of the MIT AgeLab. A Pennsylvania woman named Sarah Knauss was celebrating her 119th birthday over a decade ago. A somewhat brazen journalist asked the centenarian-plus 19 “why do you enjoy living so long?” Her reply was far more insightful than a researcher, policymaker, or frankly any expert–she said that she enjoyed her longevity because she “had her health and she could do things”. Distinguished members of the City Council, that is our challenge – to invent not just how to live longer but how to live better by enabling people to have their health and continue to do things that allow them to remain independent, productive and engaged.

Tomorrow’s aging is very new. It is not just about the story of more – more baby boomers turning 65 nearly every 7 or 8 seconds; or that they have more education; or that even during the economic downturn they have more discretionary income than any other age group. No, the real story of an aging America and an aging New York City is the core of the ‘new generation gap’ – a gap in the new expectations for old age. That gap is based upon the next generation of old’s belief that based upon their experience and based upon technological progress, life tomorrow can be made better.

A research team within the MIT Engineering Systems Division, the AgeLab believes that systems thinking that appropriately integrates a new wealth of technology with insights in human behavior and policy as well as business innovation will improve individual lives and the lives of family caregivers ultimately improving the quality of life for everyone across the lifespan.

Allow me provide a few examples:
At the MIT AgeLab we are exploring and studying advances in telecommunications from smart phones, smart houses and yes, even smart underwear and smart toilets, that are enabling us to do more than monitor someone’s health but to engage them in making the right choices. To walk rather than ride or to snack on something healthy rather than on something artificially sweet. Other devices are making it possible to provide a check up a day in the home from a nurse, a doctor or another profession that will most assuredly develop to connect individuals and families with a variety of services virtually. Improved and seamless connectivity is not only more affordable than infrequent visits to the office, but it also provides more frequent care interaction moving from yesterday’s notion of telemedicine to the emerging demands for ‘tele-wellbeing’.

Aging well is more than being healthy and at home. Transportation is the glue that holds all the big and little things we call life together. While New York City has the among the most developed transportation systems in the United States, accessibility remains a challenge. Access is more than improvements in design to provide for physical disability, it includes perceived barriers, safety, security, availability of benches, proper lighting, places to ask for directions, fare systems that are easy to use, mobile services to ensure the ride is coming and when – seamless transportation for older adults begins when we leave home, not just when we get on the bus, train or van.

The demands of an aging society and aging New York demand more than private services and public programs, we must begin to blur the lines of how we deliver services using the knowledge and resources that both the public and private sectors can offer. Aging is too big for either sector alone. An innovation borne here in Boston, Beacon Hill Village, has now been adopted in New York and in countless cities around the world. The ‘village movement’ is about neighbors working with neighbors to form ‘cooperatives’ arranging for services that may begin with the necessary, such as medical care, but also include the equally essential part of life – fun – arranging for trips to the movies thereby creating what many in New York City already enjoy, naturally occurring retirement communities in the home you have loved for decades.

For the many elderly who need and receive care from family members (e.g., given the forecasted dramatic rise in Alzheimer’s disease) we must not forget the caregivers – nearly one in four families provide an average of 21 hours a week of care. While caregiving is a gift of love, it is not without costs. New technologies and services will be critical to support caregivers, manage their own stresses and health conditions as well as ensure that they remain productive in the workplace.

And there is fun in old age, or there should be. Healthy aging requires that we rethink how we keep people engaged. Do any of you see the senior center of today meeting the expectations of older New Yorkers tomorrow? Beyond health there is learning, there is support for grandparents raising grandchildren, there is assistance to transition to a new job, there is the opportunity to volunteer and care – senior centers in the future will not be activity centers alone – they will be solution centers for older adults and family caregivers.
Allow me to provide a few recommendations for initiatives in aging policy:

*Adopt measures of well-being across the lifespan.* It is often said that ‘what gets measured, is what gets done’. The competitiveness of cities is no longer measured by infrastructure, access and expertise alone, it also relies on how happy, healthy and engaged the population is. For example, the Gallup-Healthways Well-Being Index is now a metric that can be used to assess how physical and emotional health combined with access to basic services and daily experiences in the workplace contribute to healthy, vital and productive cities. As all cities see their populations age, monitoring the well-being of the population is not just about healthcare savings today, it is about future competitiveness, equity and quality living tomorrow.

*Stimulate innovation* – Establish a living laboratory for public-private program innovations as well as the use of technology in delivery of innovative programs or private sector offerings. Measure and apply what is learned to determine future city government investments and possible applications to other neighborhoods.

*Facilitate partnerships* – New York is home to some of the leading thinkers and practitioners in aging, the Visiting Nurses Association of New York, Jewish Home & Hospital to name only a few. On the private side, Duane-Reade is more than a drug store chain, as we have seen in other parts of the world retailers can be a powerful distribution point for all kinds of services to support an aging population as well as their caregivers.

*Ensure Equity* – New services and technologies always start expensive. Creatively integrating newly developed systems in public housing and community services can serve as a way to test innovative ideas and ensure that the disadvantaged have access to the ‘next best thing.’ The procurement power of the City to purchase in bulk and stimulate private sales by example has the potential to reduce the costs of innovation to everyone.

Finally, New York City, as it has in been in so many other areas, can be an example to the world. With the appropriate measures to inform investments and progress, the creative use of technology, and the forging of effective partnerships, New York City can become the city to benchmark on how to provide seamless services and a high quality of life for its residents across the lifespan – after all, aging is not just about the old, it is about all of us.

Thank you and I welcome your questions.

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