Putting the Person at the Center: Integrating Plans for Long-Term Services and Supports and Health Care Delivery through Health Information Technology

> David O'Hara, Ph.D Joint meeting sponsored by the Office of the National Coordinator for Health Information Technology and the Administration for Community Living October 16, 2014





Westchester Institute for Human Development *Creating Better Futures* 

#### **Emerging Cognitive Support Technologies:**

A Key to Promoting Community Participation and Health for Individuals with Intellectual and Developmental Disabilities

> Concern for man himself and his fate must always constitute the chief objective of all technological endeavors... in order that the creations of our minds shall be a blessing and not a curse to mankind.

> > Albert Einstein Science & Happiness





Daniel K. Davies AbleLink Founder and President 2006 Tech Museum Laureate

#### Tele-Health: Existing and Emerging Technology Platforms





# Type 2 Diabetes and People with I/DD

 Data from 2006 Medical Expenditures Panel Survey

Health status of working age adults with cognitive limitations compared with adults with no disability Adults with I/DD significantly higher prevalence 19.4% vs 3.8%

 $_{\odot}$  Also significantly higher prevalence 6 other chronic health conditions

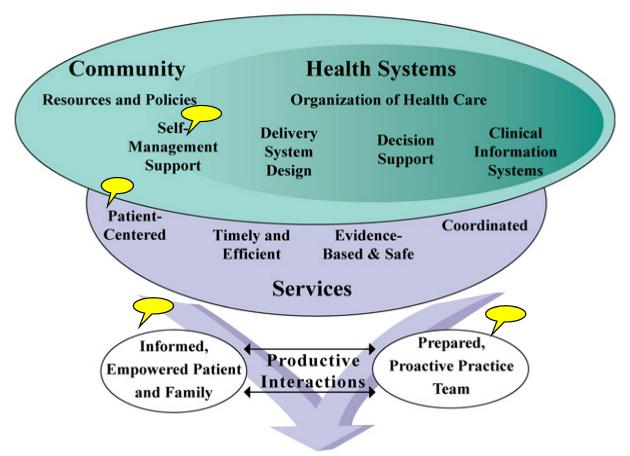
# $_{\odot}$ Adults with I/DD and diabetes significantly more likely to have 4 or more chronic illnesses

Reichard & Stolzle (June, 2011). Diabetes among adults with cognitive limitations compared to individuals with no cognitive disabilities. Intellectual and Developmental Disabilities 49 (3), p 141-154.



#### The Wagner Chronic Care Model

The Care Model



#### **Improved Outcomes**



## **Health Literacy**

- Institute of Medicine workshop reports:
  - Promoting health literacy to encourage prevention and wellness (November 1, 2011)

Research to find better pathways to improved health literacy and better health

 Innovations in health literacy (March 10, 2011) Health literacy and health disparities, better use of IT improve health literacy

 $_{\odot}$  Overall nearly nine out of 10 adults have difficulty using health information to make proper health decisions



# Premature Deaths of People with Learning Disabilities

#### • Data from a study between 2010 and 2012 in the UK

 $_{\odot}$  Looked at the causes of death among all known deaths among people with learning disabilities in the Bristol area of south-west England

 $_{\odot}$  Men with learning disabilities died, on average, 13 years sooner than the general population

 $_{\odot}$  Women with learning disabilities died, on average 20 years sooner than the general population

 $\circ$  Overall, 22% of the people with learning disabilities were under 50 at the time of death compared with just 9% of the general population

 "The cause of their premature deaths appears to be because the NHS is not being provided equitably to everyone based on need. People with learning disabilities are struggling to have their illnesses investigated, diagnosed and treated to the same extent as other people."

Heslop, et al, (March 19, 2013). Confidential inquiry into the premature deaths of people with learning disabilities. Norah Fry Research Center, Bristol University, England. http://www.bris.ac.uk/cipold/fullfinalreport.pdf Westchester Institute for Human Development

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Living Well With a Disability: a Person-Centered Planning Tool for Integrating Personal Life Goals with a Health and Wellness Plan







Session 5 detail



Session 6 detail



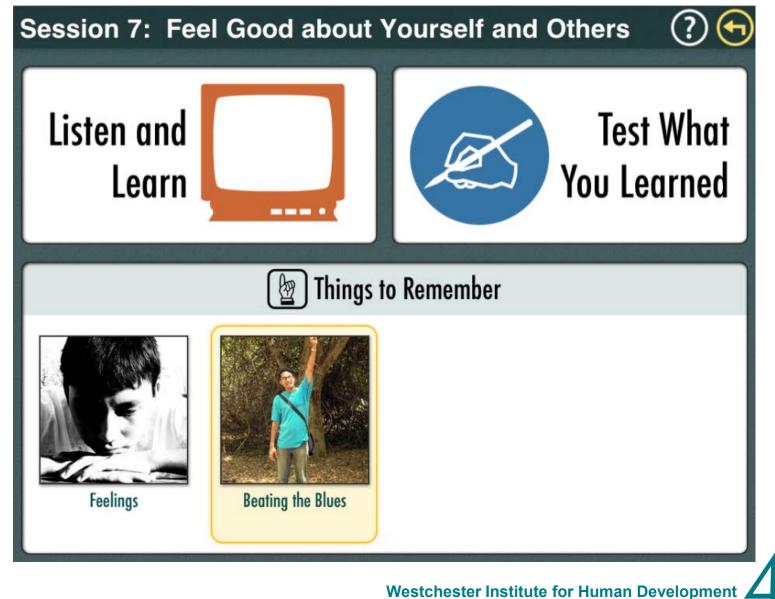
Session 7 detail



Session 8 detail







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## **Improving Oral Health**









Sanice after you eat every meal you need to go brush your teeth and you need to get your brush and your toothpaste and go to the bathroom



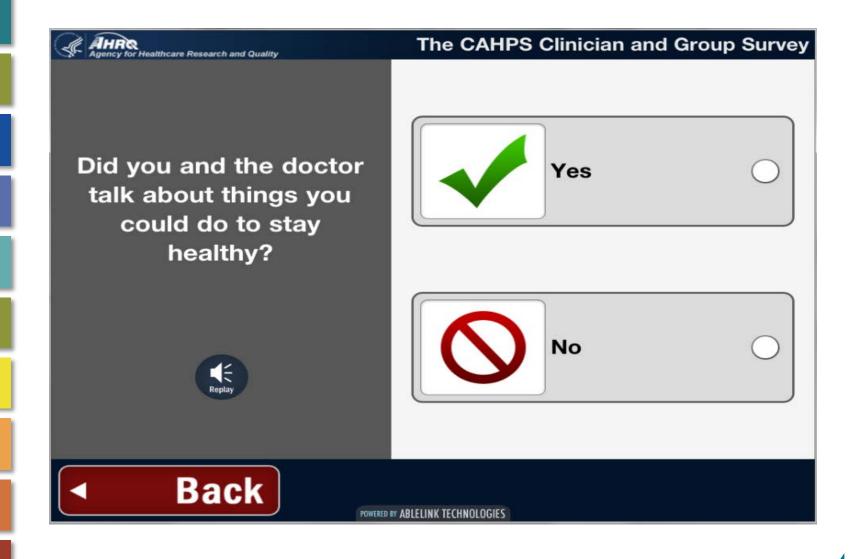
#### Self-Directed Consumer Surveys

Self-directed, survey tools, such as consumer satisfaction surveys, using multi-modal presentation and accessible design can increase independence and reduce staff time interviewing and entering/ aggregating data.





ATLAS – Accessible Testing Learning & Assessment System





Agency for Healthcare Research and Quality

#### The CAHPS Clinician and Group Survey

Did the doctor ask you to talk about all of your health problems or concerns?





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Back

#### Health Quest

An accessible survey tools to enable individuals with cognitive disabilities to become active participants in their own health and wellness.

How an	re you feeling today?	0		My HealthQuest
Health Quest	I don't feel very good.	0	How are you feeling today?	Survey
		FOWERED BY ABLEL	I feel good.	
			Health Quest	• NEXT
Nol				

TECHNOLO



# NHS Patient Experience Survey – My Health, My Say







### Access to Cloud-Based Data

AbleLink ATLAS Reports

#### Welcome to ATLAS Reports

Please enter your Customer ID and your Password to login and view your reports.

Login	
Customer ID	
Password	
Sign in	



# Survey Response Summary

AbleLink ATLAS Reports

#### Westchester Institute for Human Development

The following is a list of the surveys that are deployed by your organization. If you would like to see detailed information for each survey, please click on the links listed next to each survey.

Survey Name	Last Survey Taken	Total Surveys	Aggregate Report
The NTI Self-Determination Survey	08/29/12 11:52:59	8 (Show List)	Download Raw Data
The CAHPS Clincian and Group Survey	08/27/12 22:23:31	4 (Show List)	Download Raw Data



### Survey Response Detail

AbleLink ATLAS Reports Surveys About ATLAS

#### The NTI Self-Determination Survey

The following is a list of surveys taken for the NTI Self-Determination Study. To view the details of an individual survey, please click on the Show Survey button to the right of the survey you wish to view.

Survey ID	Device Name	Date Taken	Survey Details
82912115349	Dans iPad	08/29/12 12:06:12	Show Survey
82912115039	Dans iPad	08/29/12 11:52:59	Show Survey
82912114907	Dans iPad	08/29/12 11:49:48	Show Survey
82712221638	Dans iPad	08/27/12 22:17:32	Show Survey
82712221501	Dans iPad	08/27/12 22:15:56	Show Survey
82712143141	Larry King's iPad	08/27/12 14:32:28	Show Survey
82712142908	Helium	08/27/12 14:30:34	Show Survey
82712142603	Helium	08/27/12 14:27:25	Show Survey
82712142146	Larry King's iPad	08/27/12 14:22:21	Show Survey



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### **Individual Responses**

15. Who picked the people who help you at home?	
People helped me pick them	
16. Who decides how you spend your free time?	
People help me decide	
17. Who chose the place that you work, volunteer, or go to da	ay program?
Someone else chose	
18. Who chose the people who help you at work, when you vo	olunteer, or at your day program?
I do not have anyone helping me at work or when I volunteer	
19. Who decides what to buy with your spending money?	
People help me decide	
20. Who decides your daily schedule, like when you get up, w	/hen you eat, and when you go to sleep?
People help me decide	



# The Future

2014-2015 - Health Information Technology Fellow

- one of 12 selected by the Office of the National Coordinator for Health Information Technology
   Projects:
- Foundation grant submitted to evaluate the effectiveness of using smart technology to improve the oral health of people with I/DD.
- Joint planning grant: WIHD, University of Ulster and Trinity College, Dublin to modify the UK Type 2 Diabetes standard of care for use with smart technologies and people with IDD
- Proposal accepted by Special Olympics International to ensure full accessibility of their new EHR:

"Positioning for the Future: Intersecting Global Digital Health, Person-Centered Technology, and Health Promotion"

 Grant proposal with Cleveland Clinic to create a "virtual" consultation team to primary care physicians of adults with Down Syndrome



## The Future

#### Projects:

- Develop and deploy accessible health education, health promotion and wellness resources through currently available EHR's
- Integrate direct response patient satisfaction survey into WIHD Patient-Centered Medical Home model of care
- Create Apps for use smart technologies to support transitions for young adults with I/DD from pediatric to adult health care
- Adapt UK NHS "simple" telehealth strategy so that it is accessible for people with IDD
- "Encourage" EHR vendors to explore integration of health and social care information and goals



## WIHD Today

Creating Better Futures People with Disabilities

Vulnerable Children

Education and Training
 Innovative Services and Supports
 Community Training and Technical Assistance
 Research and Dissemination

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#### **Programs and Services**

#### For People with I/DD

- Health Center
- Assistive Technology
- Speech and Hearing Center
- Behavioral Psychology
- Early Intervention
- Community Support

#### For Vulnerable Children

- Children's Advocacy Center (Child Abuse)
- Child Welfare Services











#### WIHD Health Services

#### **Outpatient Health Center**

- Primary Care (Internal Medicine and/or Family Practice)
- Specialty Care (Neurology, Endocrinology, Cardiology, ENT, GYN, Physiatry, Podiatry, Ophthalmology, Urology, Gastroenterology, Nutrition, Psychology)
- Psychiatry
- Behavioral Psychology
- Dentistry
- Dental Van
- Speech and Hearing Center
- Assistive Technology

7,000 patients with I/DD33,000 visits



### Health Service Use: Profile of one community agency (2012)

176 individuals with I/DD

- 2219 visits in total
- 12.6 = Average visits/individual
- 47 different addresses





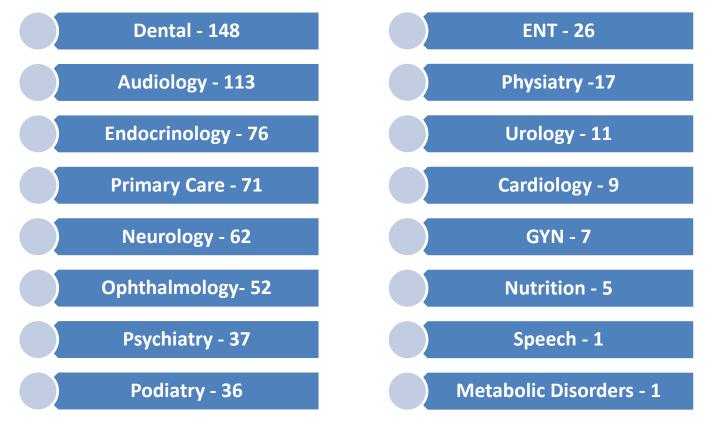






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### Same Community Agency: Services Used





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# Health Service Use of Individuals seen by Psychiatry (2012)

697 Individuals
5342 visits to psychiatry
7.7 = Average visits per patient





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# Other services utilized by these individuals

SERVICE	INDIVIDUALS	VISITS
Primary Care	478	2327
Dental	455	1710
Audiology	359	453
Ophthalmology	321	416
Neurology	266	797
Podiatry	220	680
Endocrinology	174	762
Urology, ENT, Physiatry, Nutrition, Cardiology	51-90	127-183
GYN, Speech, Behavioral Psychology, AT, Dermatology, OT, Metabolic	3-13	2-221

