12-Month Outcomes

Demonstration to Maintain Independence & Employment (DMIE) September 2009
Texas in Context

Uninsured Adults, Age 19 – 64, 2007*

<table>
<thead>
<tr>
<th>State</th>
<th>Minnesota</th>
<th>Kansas</th>
<th>Hawaii</th>
<th>Texas</th>
<th>US</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adults</td>
<td>353,000</td>
<td>278,000</td>
<td>82,000</td>
<td>4.2 million</td>
<td>36 million</td>
</tr>
<tr>
<td>Uninsured</td>
<td>11%</td>
<td>17%</td>
<td>11%</td>
<td>30%</td>
<td>20%</td>
</tr>
</tbody>
</table>

* Source: Kaiser Family Foundation, Statehealthfacts.org

- **28% of working** Texans are uninsured (highest rate in nation)
- Large county hospital districts care for those without insurance
- 250,000 working age Texans with disabilities receive SSI and 380,000 receive SSDI
- Medicaid expenses for working age Texans = $3.5 billion
- Medicaid expenses in Harris County = $375.5 million
**Background**

- **$21.5 million grant from Centers for Medicare & Medicaid Studies (CMS) to State of Texas (Dept. of State Health Services)**
  - HCHD provides intervention to patients
  - UT Austin ARI provides independent evaluation
- **Goal:** Determine whether specific interventions can help keep HCHD patients with mental, behavioral, and physical disabilities:
  - working and off public disability assistance (SSI or SSDI)
  - decrease utilization of high cost medical resources (e.g., emergency and in-patient)
  - stay healthy
Study Design

- 1,616 participants randomized into two groups:
  - 904 intervention
  - 712 control
- Sample: Working adults 21 - 60 yrs. enrolled in Harris County healthcare program
- Interventions (provided or contracted by HCHD)
  - Free physical and behavioral healthcare, prescriptions, dental and vision care
  - Case management by masters level social workers, nurses, and vocational counselors
    - Individual planning, advocacy and coordination
    - Navigation of health system
    - Connection to community resources
    - Employment/vocational supports
Implementation Challenges

- No state matching funds appropriated
- Multiple IRBs
- Contracting challenges (lack of vendors, procurement system issues, contract issues)
- Size and complexity of health system
- Recruitment – achieving desired sample size
- Implementing person-centered navigation techniques (motivational interviewing, etc.)
- Obtaining data from state and local sources
Who is Working Well?

- Serious Mental Illness (11%), Other behavioral/physical (89%)
- Most common physical health issues based on ICD-9 diagnoses: Musculoskeletal, Respiratory, Diabetes, Neurological, COPD
- Female (76%), Minority (72%), middle-aged (70% > 45 yrs)
- High school diploma or less (62%)
- Income < 100% FPL (48%), < 200% FPL (87%)
- Under 25% have access to employer-sponsored insurance
- Work on average 33 hours per week
- 41% report at least one functional limitation (ADLs and/or IADLs)
- Self-reported health conditions include high blood pressure (57%), depression (51%), anxiety disorder (32%), diabetes (29%)
Current Data

- Participants who have completed the 12-months survey (91% of original sample):
  - 833 Intervention
  - 637 Control
- Outcomes are adjusted for:
  - Age
  - Gender
  - Race/Ethnicity
  - Serious Mental Illness status
  - Occupational Group
  - Health morbidity index (ACG score)
  - Recruitment Cohort (Mail/Phone versus Clinic In-person)
**Additional Evaluation Data**

- Surveys conducted by PPRI
  - 18-months (ends in November)
  - 24-months (ends in May)
- Other data
  - State agency data (collected through 6/30/2009)
  - HCHD encounter/pharmacy data (collected through 6/30/2009)
- Participant Transition data
  - Monthly phone contacts with standard questions
  - One-time in-depth semi-structured interviews
Key Questions

- Do intervention and control groups differ on key participant outcomes?
- What intervention services predicted better patient outcomes?
- Are there overall differences in patient charges between intervention and control?
**Group Difference: Federal Disability**

- Intervention group participants recruited by mail/telephone (60% of participants) were half as likely to receive SSI/SSDI as the control group.
- Few individuals in either group went on disability
- Possibly, mail/telephone recruits were more motivated to take advantage of the interventions.

<table>
<thead>
<tr>
<th>Sub-Group</th>
<th>Sample Size</th>
<th>Intervention</th>
<th>Control</th>
<th>Difference</th>
<th>Significance (p-Value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mail/Phone</td>
<td>869</td>
<td>2.9%</td>
<td>5.6%</td>
<td>-2.7%</td>
<td>0.05</td>
</tr>
<tr>
<td>In-person</td>
<td>599</td>
<td>6.3%</td>
<td>6.0%</td>
<td>0.2%</td>
<td>0.89</td>
</tr>
</tbody>
</table>
**Group Difference: Access to Healthcare**

- Significantly more intervention participants (89.5%) have accessed outpatient care in the past year than control (80.1%).
- Use of mental health services has increased significantly in the intervention group and decreased in the control group.
- More participants recruited by mail used outpatient services (89%) than in-person recruits (75%).

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Sample Size</th>
<th>Intervention</th>
<th>Control</th>
<th>Difference</th>
<th>Odds Ratio</th>
<th>Significance (p-Value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent utilizing mental health services (self-reported)</td>
<td>1465</td>
<td>26.9%</td>
<td>20.9%</td>
<td>6.0%</td>
<td>1.61</td>
<td>0.00*</td>
</tr>
<tr>
<td>Percent utilizing outpatient services (HCHD-reported)</td>
<td>1470</td>
<td>89.5%</td>
<td>80.1%</td>
<td>9.4%</td>
<td>2.34</td>
<td>0.00*</td>
</tr>
<tr>
<td>Percent seen in a mental health pavilion (HCHD-reported)</td>
<td>1470</td>
<td>17.8%</td>
<td>9.5%</td>
<td>8.3%</td>
<td>2.46</td>
<td>0.00*</td>
</tr>
</tbody>
</table>
Group Difference: Satisfaction with Healthcare

- Intervention participants who were not satisfied at enrollment, were more likely to be satisfied with healthcare at 12-months (58%) than the Control group (45%).

- Participants who were satisfied or very satisfied at enrollment, were as satisfied with overall healthcare at 12-months. (Intervention - 85%, Control group - 81%)
The intervention group reported slightly more hours worked, income, and work effort.

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Sample Size</th>
<th>Intervention</th>
<th>Control</th>
<th>Difference</th>
<th>Percent Difference</th>
<th>Significance (p-Value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total hours worked in past year (mean)</td>
<td>1423</td>
<td>1,528</td>
<td>1,504</td>
<td>24.1</td>
<td>1.6%</td>
<td>0.42</td>
</tr>
<tr>
<td>TWC-reported job earnings - individual (mean annual earnings)</td>
<td>1343</td>
<td>$14,162</td>
<td>$14,115</td>
<td>$46</td>
<td>0.3%</td>
<td>0.91</td>
</tr>
</tbody>
</table>
Identifying Individual Risk

- ACG scores are based on ICD-9 diagnoses
- Used widely for predicting future costs, case-mix adjustment, physician profiling, rate-setting
- Focus on the person rather than a disease
- Can use to identify people most in need of health interventions (care management)
- Higher DMIE health morbidity (ACG score) was:
  - strongly related to higher OP, ER, and IP usage
  - Poorer mental and physical health
  - More negative work and employment outcomes
Impact of Intervention Services

- People in greater need got more case management
- Higher Case Manager hours were related to greater mental health access
- High levels of case management were related to:
  - Higher TWC income and earnings
  - More positive work impact, work goals and intention to continue working
  - Less likely to report needing emergency care and fewer emergency care visits
  - Fewer outpatient visits
  - Greater satisfaction with healthcare overall
Differences in Overall charges
Process Evaluation Findings

- Interventions, such as substance abuse services and dental care, have been difficult to implement.

- Barriers to healthcare include:
  - making appointments (up to 3 months w/o intervention)
  - keeping appointments (taking time off of work)
  - navigating the complex county health system

- Most participants identify themselves as workers and do not want to seek disability benefits, although they continue to face significant economic and health issues.
Case Managers Speak

- Effective engagement strategies include:
  - Encouraging participants to be more proactive (empowered) in managing their health and employment;
  - Providing supportive counseling, vocational assistance and referrals to community resources;
  - Facilitating communication with the health care team; and
  - Using motivational interviewing, reflective listening, and insight induction.
Case Managers Speak

- The interventions most needed by participants include (in order of importance):
  - Expedited medical appointments
  - Prescription assistance
  - Dental services
  - Vocational services
  - Mental health care
  - Medical care
  - Specialty care
- Continuing challenges include:
  - Expediting / obtaining services (navigation)
  - Transition from Working Well
Participants report that navigation assistance (via case management), lack of co-payment requirements for services and improved access to specialty services (such as psychiatry) are improving their lives.

Greater access to services has enabled patients to deal with health issues more promptly.

Case manager services has helped them self-manage their healthcare by helping them get the services that they need.
Lifesaving Navigation

- “Your program has saved my life I feel.”

- “I wanted someone to know how thankful I am. After joining, I was diagnosed with Lung Cancer and not given a very good prognosis. In a nut shell, (my case manager) has worked so closely with me to help me with any problems that have arrived and has kept me virtually stress-free during a very difficult time in my life…

- She is teaching me the system of HCHD so that I can help myself with such things as billing issues, medication needs, problems with appointments…

- Getting paper work completed and looked at in a timely basis so that I might go on to Radiation treatment in a timely basis was only one small yet huge thing she helped with. The process took two and a half months and I'm certain without her help it could have taken much more...I did go through Radiation treatment and … I feel better than I did 10 years ago…Now I face Chemo and with her help, everything is running smoothly… She never forgets problems I am having and always comes through with workable solutions that I may use and get things done.

- She is teaching me how to deal with red-tape and she keeps me from panicking when I feel I'm up against a brick wall.”
Phase-Down Plan

- Intervention services conclude on September 30, 2009.
- Key evaluation activities for the post-intervention period:
  - Monitor transition of participants to standard HCHD care through monthly phone calls
  - Continue current evaluation activities
    - 18- and 24-month surveys
    - In-person post-evaluation interview with each participant
    - Case manager focus groups and interviews
  - Examine differences between intervention and control groups during phase-down period; and
  - Analyze potential for local sustainability and national replicability of Texas DMIE model.
Phase-Down Plan

- Intervention group received:
  - Letter describing project phase-down and end of services
  - Newsletter outlining resources available after end of intervention
  - Contact from Case Manager further explaining the phase-down process
  - Individual Transition Plan addressing individual goals and needs as well as community resources.

- Control group received letter reminding them of their continuing surveys and continuing HCHD services

- Providers (external service contractors) were notified of end of project and phase-down procedures.
**Phase-Down Plan**

- UT ARI will continue:
  - Data collection of 12-, 18-, and 24-month surveys;
  - Data collection of healthcare utilization information, as well as state and federal data;
  - Process evaluations, including interviews with individual participants, case managers and stakeholders;
  - Outcome reports at 12-, 18-, and 24-month surveys; and
  - Reports on local sustainability and national replicability analysis.

- HCHD will provide administrative support through June 2010, including evaluation support (data submission, assistance with interpreting data, etc.).
Ellen was diagnosed with severe mental illness and had recently attempted suicide. Her illness had limited her ability to perform daily activities. She was unemployed and was applying for SSI. Through *Working Well* she obtained psychiatric assessment, a revised diagnosis and the right medications to treat her mental illness. *Working Well* provided regular mental health and vocational counseling and placement assistance. She now has a positive outlook. She works 30+hrs a week in a food service job and looks forward to continued independence and employment.
had very high blood pressure, was significantly overweight, depressed and abusing drugs. He was admitted for substance abuse treatment. The case manager worked with Jimmy’s supervisor to make sure he did not get fired from his warehouse job while he was in treatment. She also connected Jimmy with a psychiatrist who prescribed medication for depression. Today, Jimmy is working, has lost a significant amount of weight and has his blood pressure under control.
was at risk of losing his delivery job. Before joining Working Well, he had poorly controlled diabetes which led to painful foot ulcers that made walking difficult. The Working Well case manager obtained orthopedic shoes for him which allows him to work full time. The case manager also worked with Juan to develop a diabetic diet and individual exercise plan. Juan was also linked to a psychiatrist who prescribed medication for his bi-polar disorder. He subsequently received a raise for exceptional performance.
Conclusions

- The majority of the intervention group is receiving SSI/SSDI at a significantly lower rate than the control group.
- The intervention group has increased access to health care, including outpatient services, prescription drugs and specialty services (mental, dental and optical care).
- Intervention group participants report satisfaction with case management, reduced costs and improved access.
- ACG health morbidity scores can be effectively related to health outcomes and could be used to identify persons needing assistance.
- Health navigation relates to better outcomes.
- More time is needed to determine if differences are actual trends and can be sustained.
Questions

- Contact Information:
  - Dena Stoner (dena.stoner@dshs.state.tx.us)
  - Tom Bohman (bohman@austin.utexas.edu)
  - Doris Chimera (Doris_Chimera@hchd.tmc.edu)