

**2012 ANNUAL REPORT  
TO THE GOVERNOR AND LEGISLATURE OF NEW YORK STATE  
ON GERIATRIC MENTAL HEALTH & CHEMICAL DEPENDENCE**

**I: INTRODUCTION**

With lessons learned from New York State's geriatric service demonstration program, a focus on fiscal viability, and the potential for providers to replicate or otherwise create effective and sustainable programs, continued progress is being made to better address the needs of older adults for mental health and chemical dependence services. A special focus of this report is evaluation data and lessons learned from the first round of service demonstration projects (2007-2012) on the integration of physical and mental health care. Also included are descriptions of 21 new projects to integrate physical and behavioral health care for the elderly that constitute the second round of service demonstration program grants awarded in 2011.

**II: BACKGROUND**

New York State enacted the Geriatric Mental Health Act on August 23, 2005. The law, which took effect on April 1, 2006, authorized the establishment of an Interagency Geriatric Mental Health Planning Council (the Council), a geriatric service demonstration program, and a requirement for an annual report to the Governor and the Legislature with a long term plan regarding the geriatric mental health needs of the residents of New York.

In 2008, amendments to the Geriatric Mental Health Act expanded the scope of the Council to include chemical dependence and veterans. The amendments (1) changed the name of the Interagency Geriatric Mental Health Planning Council to the Interagency Geriatric Mental Health and Chemical Dependence Planning Council; (2) increased membership of the Council from 15 to 19 members; (3) added the Commissioner of Alcoholism and Substance Abuse Services and the Director of the Division of Veterans' Affairs as Co-chairs of the Council; (4) added the Adjutant General for the State of New York as an Ex-Officio member of the Council; and (5) changed requirements for Council recommendations and joint agency annual reports to include the Commissioner of Alcoholism and Substance Abuse Services, the Director of the Division of Veterans' Affairs, and the Adjutant General and to address geriatric mental health and chemical dependency needs.

**III: COUNCIL MEMBERSHIP**

The Interagency Geriatric Mental Health and Chemical Dependence Planning Council consists of 19 members, as follows:

- The Commissioner of Mental Health, Co-chair of the Council;
- The Director of the State Office for the Aging, Co-chair of the Council;

- The Commissioner of Alcoholism and Substance Abuse Services, Co-chair of the Council;
- The Director of the Division of Veterans' Affairs, Co-chair of the Council;
- One member representing the Office for People with Developmental Disabilities;
- The Adjutant General (Ex-Officio Member of the Council);
- One member representing the Commission on Quality of Care and Advocacy for Persons with Disabilities;
- One member representing the Department of Health;
- One member representing the Education Department and the Board of Regents;
- One member representing the Office of Children and Family Services;
- One member representing the Office of Temporary and Disability Assistance;
- Four members appointed by the Governor;
- Two members appointed by the Temporary President of the Senate; and
- Two members appointed by the Speaker of the Assembly.

<b>IV: FIRST ROUND OF HEALTH INTEGRATION PROJECTS (2007-2012)</b>
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### **Program Descriptions**

Physical Health – Mental Health Integration programs were designed to provide physical and mental health care for older adults whose independence, tenure, or survival in the community was in jeopardy because of a behavioral health problem. These projects entailed either the co-location of mental health specialists within primary care or the improvement of collaboration between separate providers.

- Flushing Hospital Medical Center expanded the integration of mental health care within its primary care clinic to co-locate culturally appropriate services and provide support, outreach, and educational services. Those who need treatment were offered individual/group therapy, including lifestyle modification, and pharmacotherapy as needed.
- Metropolitan Hospital Center co-located mental health and physical health services in the hospital's geriatric outpatient center to primarily serve the underserved, socio-economically disadvantaged, mostly minority populations within East Harlem and other communities in its service area.
- New York-Presbyterian's Irving Sherwood Wright Medical Center on Aging co-located mental health screening, assessment, and treatment services with its existing outpatient geriatric primary care services and integrated mental health services in its geriatric medical house calls program.
- The South Oaks Hospital program increased access to mental health services and improved the integration of physical and mental health care for older adults on the North Fork of Long Island. The project's mental health practitioner was co-located at a primary care physician's office and in offices at Eastern Long Island Hospital.

- The University of Rochester, Jewish Senior Life, and Jewish Family Service of Rochester integrated physical and mental health care with a homebound, older adult population. Interdisciplinary medical and mental health team communication and consultation were facilitated by regular interdisciplinary team meetings.
- The Office of Community Services for Warren and Washington Counties provided oversight for a collaborative physical and mental health integration program in two rural counties involving a network of federally qualified health centers, a county public health department, a county home care program, and a hospital-affiliated internal medicine practice.
- Though not funded with monies allocated to the geriatric service demonstration program, the Greene County Mental Health Center operated a program that provided mental health assessment and treatment in five primary care physician offices to reach people – especially the elderly – who would not otherwise seek or be able to access mental health services.

### **Program Evaluation Findings: Data**

New York State Office of Mental Health (OMH) staff in the Office of Performance Management and Evaluation conducted a program evaluation of the first round of health integration projects. A summary of their findings related to data is included in the Appendix of this report.

### **Program Evaluation Findings: Lessons Learned**

Staff from all seven health integration projects provided feedback on implementation, integration of service delivery, and sustainability throughout the five-year grant period. OMH staff gathered this information through site visits, interviews, and interactions with project staff, as well as their own observations. The ten lessons learned are summarized below as recommendations.

#### **Obtain High Level Organizational and Administrative Support**

- The health integration projects operated in different organizational settings, ranging from large hospital centers to primary care physician offices and a home-based geriatric primary care practice. Projects co-located in hospital settings consistently cited the importance of having a health integration champion high in their organization's hierarchy.
- Supporters in important administrative positions were able to articulate the vision of integrated care and facilitate problem solving. Projects with strong support had much better prospects for continuing in some fashion after the grant period.

#### **Plan for Sustainability from the Beginning**

- All seven projects reported that it was extraordinarily difficult to shift from a purely clinical to a clinical-and-sustainable culture after implementing their program models, underscoring the importance of planning for fiscal viability and sustainability from the onset. Some projects, for example, needed to change previously established staffing patterns.

- Understand Medicare and other service reimbursement systems, and employ staff who are able to be reimbursed for services.
- Know every patient's payer benefit package; customize encounter billing forms to include covered services; and monitor the program's case/payer mix on an ongoing basis.

### **Understand the Culture of Primary Care**

- Successful integration of mental and primary health care depended on genuine access to primary care service delivery settings. Because protocols for conducting mental health screens and communication with clinical and administrative primary care staff needed to be established, an understanding of traditional office practices was key to implementing integration protocols acceptable to primary care staff.
- Space for mental health staff in primary care settings was an issue at nearly each site.
- The health integration projects that placed mental health staff in primary care office settings learned to be cognizant of the challenges to their staff of working in a satellite location. In a number of situations, staff had to confront the challenge of balancing the policies of their own agency with the needs of their host site and their patients. One project reported that this "requires strong professional ethics, awareness of boundaries, flexibility, and a desire to change the way mental health services have traditionally been delivered."

### **Prepare for Primary Care Challenges**

- Discussing and demonstrating the benefit of integrating mental and physical health care for primary care providers is critically important, as all of the health integration projects noted resistance in various ways and at various levels of intensity.
- Examples of challenges include providers too busy to incorporate screening into their routine practices and those who feel can already identify their patients with mental health problems in the course of routine visits.
- Many projects described the diligence needed to ensure that screening protocols were adhered to. Early on, physicians and other clinical and administrative staff in primary care settings needed frequent reminders.
- As integration became more a part of the primary care environment, most providers were comfortable raising behavioral health issues with their patients during routine visits and took increased advantage of their partnership with their mental health colleagues. The introduction of mental health screening into the primary care setting provided a vehicle for starting a conversation with patients about mental health concerns.

## **Use Psychiatry Resources**

- For a number of projects, psychiatrists played an important role in facilitating integrated mental and physical health care. Psychiatrists were described as being particularly effective in communicating with their primary care colleagues, as they were able to “bio-medicalize” the message of integration with primary care.
- Over time, primary care physicians in co-located hospital-based clinics became more comfortable consulting – formally and informally – with psychiatrists about patients who presented more serious mental health concerns.

## **Develop Educational Opportunities**

- The health integration projects that developed educational opportunities for primary care physicians and patients perceived great benefit, including a reduced reluctance to discuss mental health concerns with patients and to treat mild levels of mental illness directly through prescribed medication.
- Several projects were particularly successful by scheduling routine weekly or monthly educational sessions for primary care physicians. Presentations by their psychiatry colleagues also served to reinforce the legitimacy and importance of integration.

## **Use Multidisciplinary Teams**

- The integration of mental and physical health care results in the identification of issues that call for professional expertise from a variety of health care disciplines.
- A number of co-location sites developed teams consisting of primary care physicians, psychiatrists, nurse practitioners, social workers, and case managers that met regularly to review new and ongoing cases. These processes resulted in more seamless referrals between primary and mental health providers, improved relationships between practitioners, and contributed to greater acceptance of mental health interventions in primary care settings.
- Ensuring that an array of needed professional competencies is represented on a multidisciplinary team is especially challenging in difficult economic times. One project enhanced core staffing by recruiting part-time professionals to work on their health integration team.

## **Establish Formal Meeting Times**

- Although co-location and collaborative models of integration often provide for helpful, informal opportunities to communicate, the health integration projects found there is no substitute for regularly scheduled meetings.
- The purpose, frequency, and duration of regular meetings between mental health and clinical or administrative primary care staff varied by project.

## **Prepare to Address Psychosocial Needs**

- In assessing mental and physical health needs, the projects identified many psychosocial needs, such as social isolation, family caregiving, housing, transportation, and financial problems. Addressing psychosocial needs was often considered as important as pharmacotherapy or verbal therapy because of their negative impact on health care.
- Some providers felt that addressing psychosocial needs was more than they could handle. Compounding the issue was the cost of providing case management services.
- Planners of integrated health care should anticipate identifying and addressing important psychosocial needs, either directly or in partnership with other providers of services.

## **Monitor Patient Reaction to Integration**

- Despite common concerns that stigma associated with mental illness would discourage physical health care patients from discussing their mental health, patients came to accept and welcome attention to mental health in project primary care settings. The results of integrated health care in these primary care settings suggest a reduction of stigma.

# **V: SECOND ROUND OF HEALTH INTEGRATION PROJECTS (2011-2014)**

## **Program Descriptions**

For the second round of service demonstration program grants, OMH solicited proposals in April 2011 to integrate physical and behavioral health care in either behavioral health care settings (Model 1) or physical health care settings (Model 2) to assist older adults with mental health and/or substance use disorders in New York State.

A total of 21 awards were made in two phases. Phase I awards (10/1/11 - 9/30/13) were made to five projects, and Phase II awards (7/1/12 - 6/30/14) were made to 16 projects. The summaries below are based on each grantee's proposal to provide Integrated Physical and Behavioral Health Care for the Elderly.

### **Phase I Awards**

#### **Model 1 Projects: Integrated Care in Behavioral Health Settings**

- The Clubhouse of Suffolk's Personalized Recovery-Oriented Services (PROS) program, in collaboration with Family Residences and Essential Enterprises, will operate an integrated health care program for adults age 55 or older with a serious mental and/or substance use disorder. A physician and a nurse practitioner will perform on-site primary care including screening and physical exams. Peer wellness coach mentors will be trained to engage members in healthy lifestyle choices, with an emphasis on coaching for the prevention and management of metabolic syndrome.

- Flushing Hospital Medical Center's outpatient mental health clinic will implement an integrated health care program that will enable their older adult patients to access primary care services at the clinic. The hospital plans to hire a full-time nurse practitioner who will focus on preventive care and the interrelationship between a patient's medical and psychiatric illnesses. A project management team from the Departments of Psychiatry, Addiction Services, and Ambulatory Care will implement the program, which is expected to reduce the impact of chronic diseases that result in avoidable medical and psychiatric hospitalizations.
- Interborough Developmental and Consultation Center plans to pilot an integrated physical and behavioral health care program for the elderly at their Flatbush outpatient mental health clinic. This site has high concentrations of older Russian immigrants seeking integrated care. A bilingual nurse practitioner will be hired to work in collaboration with a physician to provide integrated care, which includes physical exams; health wellness groups; complex care management; integrated physical and behavioral health treatment plans; and additional services.
- Mercy Medical Center in Garden City will renovate on-site clinic space to conduct physical examinations, add a nurse practitioner and support personnel, and reorganize existing procedures to integrate the delivery of care provided by both physical and behavioral health staff. As the newest addition to staff already well versed in the integrated delivery of care, the part-time physician's assistant will inform the development of treatment plans and ultimately help ensure improvement of outcomes such as medication adherence, and treatment of hypertension, diabetes, heart disease, asthma, and obesity.
- Southeast Nassau Guidance Center will hire a nurse practitioner with a specialty in gerontology and a medical case manager. Operating within the model of a person-centered healthcare home, the nurse practitioner and other specialty staff will assess and medically monitor adults age 55 or older receiving treatment in the agency's mental health clinic. Expected positive outcomes include health physicals completed for all program participants, improvements in medication compliance, and a substantial decrease in the medical hospitalization rate and medical emergency room visits of program participants.

## **Phase II Awards**

### **Model 1 Projects: Integrated Care in Behavioral Health Care Settings**

- Comunilife will establish a program of co-ordinate behavioral and physical health care management for Latino adults age 55 or older in an outpatient mental health clinic in the Bronx that serves primarily Latino adults, children, and families. A registered nurse will be added to a designated clinical team that includes a bi-lingual psychiatrist and a number of part-time social workers and therapists to address behavioral, physical, and socio-economic needs. The aim is to improve client health literacy, medication adherence, behavior and lifestyle choices, range of services received, and overall behavioral and physical health.
- Coney Island Hospital will staff a planned outpatient mental health clinic satellite at the Council Center for Senior Citizens in Brooklyn with a part-time social worker and nurse

practitioner to integrate a variety of physical health services with behavioral health care. For a multi-ethnic population of older adults that includes Jewish-Americans, Russian, and Asian immigrants, the program model was designed to improve access to care and increase adherence to treatment recommendations by providing services in familiar surroundings.

- Hudson Valley Mental Health will partner with Hudson River HealthCare, an Article 28 health facility, to integrate physical health care into their outpatient mental health clinics. The agency will begin by integrating care at its Dover Plains site, where physical health care visits will be provided by a nurse practitioner. A half-time bilingual social worker, who will work with clients regarding their physical health care needs, will also oversee gatekeeper outreach efforts in the community and conduct support groups. The project plans to utilize teleconferencing as needed to connect behavioral and physical health care prescribers.
- Institute for Community Living will co-locate a part-time primary care provider, nurse care manager, and peer wellness coach in their outpatient mental health clinic in Canarsie to provide on-site health assessment/monitoring and care management/coordination. The target population is elderly clients who do not have primary care providers; those who are not using primary care providers listed in their records; and those receiving treatment from multiple health providers without the benefit of care coordination. Outreach is planned to identify underserved older adults living in public housing near the clinic.
- The Mental Health Association of Nassau County, in partnership with the Family and Children's Association and NuHealth (Nassau University Medical Center), will co-locate a physician at their behavioral health site in Hempstead and at the Family and Children's Association's outpatient mental health clinic in Roosevelt. The expectation is that the co-location of a primary care provider in these settings will allow them to function as health homes for their consumers. For mental health consumers age 55 or older, the goals are to improve overall health, promote recovery, foster independence, and reduce public expenditures.
- Monsignor Carr Institute's health integration program will provide health screening and assessment, as needed physical examinations, health monitoring, follow-up, and care coordination services for clients age 55 or older at their outpatient mental health and chemical dependency clinics in Erie County. The agency will hire a full-time medical assistant and contract for a part-time nurse practitioner, who will maintain regular hours at the two clinics and also consult with mental health and chemical dependency staff on treatment options.
- Service Program for Older People plans to hire a care coordinator/nurse practitioner to coordinate all medical services for their outpatient mental health and homebound clients, as well as expand the hours of their psychiatrist to work in partnership with the care coordinator. While the program will serve adults age 55 or older who come to the agency for behavioral health services, it especially seeks to focus on hard-to-reach groups of older adults, such as the frail homebound elderly and Spanish-speaking older adults. Clients without medical providers will be provided them through the agency's program partners.

- Sound View Throgs Neck Community Health Center will provide primary health care screening, intervention, and treatment services tailored to individuals age 55 or older with serious mental health and substance use disorders in their outpatient mental health clinics in the Bronx. The integrated program will include the employment of primary care health professionals as well as referrals for highly complex cases to their key partner, Montefiore Medical Center. The goal is to develop a health home model of quality and cost effective health care for a target population with a high prevalence of multiple chronic health conditions.
- Union Settlement Association will add a full-time nurse practitioner and a part-time licensed practical nurse to the staff of their Johnson Counseling Center outpatient mental health clinic and its satellite senior centers in East Harlem to integrate health care for their clients age 55 or older. Working as part of a team with each client's therapist or social worker and primary psychiatrist, the new staff will provide on-site physical health assessments, screening, monitoring, treatment, and referrals to partners and others for additional health services.

### **Model 2 Projects: Integrated Care in Physical Health Care Settings**

- Adirondack Medical Center will integrate behavioral health care services for adults age 55 or older at their primary health clinics located in Essex, Franklin, and Hamilton counties. A Licensed Clinical Social Worker with the "R" privilege (LCSW-R) will be hired and co-located at the clinics, completing assessments and consulting with care team members. The medical home care team consists of primary care providers, a care coordinator, nutritionist, a doctor of pharmacy, psychiatrist, and a health educator. Adirondack Medical Center anticipates a sustainable model that will improve health outcomes for the target population.
- Bassett Medical Center will integrate behavioral health care services for adults age 55 years or older at three of their primary care clinics in Schoharie County, which are located in Cobleskill, Middleburgh, and Sharon Springs. An on-site bachelor's level social worker or psychologist will develop an assessment tool kit of screening instruments, train the primary care teams how to use them, and initiate assessments. An on-site LCSW-R will complete the assessment process, in collaboration with the primary care teams, and provide behavioral health treatment services, including counseling.
- Cayuga Counseling Services will provide behavioral health services to residents of the Mercy Health and Rehabilitation Center and the Cayuga County Nursing Home. A licensed psychiatric nurse practitioner will provide medication consultation services, and a licensed therapist will provide therapy for adults 55 years of age and older. Expected outcomes include the alleviation of symptoms of depression, anxiety, and psychosis, and improving the quality of life of those who live in these elder care settings.
- Family Services of Chemung County will develop a menu of behavioral health screening, assessment, and clinical services – provided on a contractual basis – to enhance the physical health care services of primary care providers. In the first year of the grant, these services will be provided for a target population of Medicaid eligible adults age 55 or older enrolled in a designated managed care practice based on the medical home model, and with additional

providers in the second and subsequent years. The intent is to create a sustainable model of better integrated services with multiple funding.

- Henry Street Settlement will integrate health care for low income adults age 55 or older in New York City's Community District 3, including the Lower East Side and Chinatown, with a focus on older adults living in the Vladeck Houses Naturally Occurring Retirement Community. Functioning as a geriatric care manager, a LCSW will be stationed at the agency's Article 28 medical health care facility, which is located in the same building as their outpatient mental health clinic, and facilitate the integration of physical and behavioral health care and senior services.
- Kingsbrook Jewish Medical Center plans to hire a psychiatric nurse practitioner to integrate behavioral health care services for the elderly at the hospital's Pierre Toussaint Family Health Center in the Bedford Stuyvesant – Crown Heights neighborhood of Brooklyn. The area is home to a largely underserved population of African or Caribbean descent. Utilizing integrated patient care teams, the program seeks to identify and treat behavioral health disorders more effectively, modify negative lifestyle behaviors, improve self-management skills for those with one or more chronic diseases, and prevent avoidable medical and psychiatric hospitalizations.
- Lincoln Medical and Mental Health Center plans to use an enhanced chronic care model for the integration of care in their medicine and geriatric outpatient practices. The model co-locates a full-time Licensed Clinical Social Worker (LCSW) and a consulting psychiatrist with primary care staff in the primary care setting and uses a collaborative, integrated, holistic approach to more effectively identify and treat behavioral health disorders among older patients. The program will target 1,000 patients age 55 or older with both chronic and mental health conditions.

## **VI: SERVICE DEMONSTRATION PROJECT SUPPORTS**

As they have since 2007, OMH staff in the Adult Community Care Group's Bureau of Program and Policy Development continue to provide ongoing program operational support for the geriatric service demonstration projects. Bureau staff have responsibilities for assigned projects that include on-site and off-site consultation and project oversight.

### **Geriatric Technical Assistance Center**

In addition, OMH solicited proposals in 2011 to establish a Geriatric Technical Assistance Center (GTAC) to provide programmatic and fiscal training and technical assistance for the second round of service demonstration program grants. The successful applicant was the National Council for Community Behavioral Healthcare, which began working with the new health integration projects and OMH operational support staff in March 2012.

GTAC's approach to promote the bidirectional integration of physical and behavioral health care for the elderly includes:

- Bimonthly webinars or subject expert presentations, a grantee website with integrated care resources, a grantee newsletter, and a dedicated listserv to facilitate collaborative learning among grantees;
- Individual agency assessments, individual technical assistance plans that are updated quarterly, quarterly summaries of individual technical assistance requests, and monthly grantee reports;
- Face-to-face learning community meetings three times a year in Albany or New York City for each of the two program models, quarterly individual calls, and bimonthly group calls for each of the two program models;
- Individual fiscal/billing consultation calls, an integrated care planning guide, and a fiscal sustainability tool; and
- Physical health and behavioral health screening tools, data collection measures, data collection assistance, and data analyses and reports.

## **VII: PLANNING**

With lessons learned from New York State's geriatric service demonstration program, a focus on fiscal viability, and the potential for providers to replicate or otherwise create effective and sustainable programs, planning continues to be informed by the geriatric service demonstration projects. Doing so reflects Council discussions in 2008 that urged capitalizing on the projects to identify lessons learned and innovative practices to set the base for geriatric mental health and chemical dependence care in the future.

### **Planning Summary**

- The 2007-2012 Physical Health – Mental Health Integration projects successfully established an effective mental health presence in primary care settings. As detailed in the Appendix, screening protocols resulted in the identification of a substantial number of individuals age 60 or older with some level of mental health need. These individuals were linked to services at a very high rate, and patients identified as having moderate to severe symptoms of depression and/or anxiety showed very high rates of improvement. In addition, at some programs the success of screening protocols implemented extended to younger patients age 50-59, who were recommended for treatment at higher rates than older patients.
- Program planners seeking to successfully develop the integration of mental health and physical health care in primary care settings would benefit from reviewing the evaluation data and considering the recommendations that emerged from lessons learned in order to maximize the probability of success.

- Self-descriptive information about each of the seven health integration projects, including contacts and – often – project-specific resources, is posted on the OMH Geriatric Mental Health website at <http://www.omh.ny.gov/omhweb/geriatric/grants/2007.html>
- Fourteen of the 21 new Integrated Physical and Behavioral Health Care projects are Model 1 projects to integrate physical and behavioral health care in behavioral health care settings – a model not tested in the first round of service demonstration program grants.

These projects are to identify and assess physical health disorders and behavioral and psychosocial issues that have an impact on health care; integrate or highly coordinate assessment, treatment, and any associated care management services; add physical health staff to their behavioral health staffing patterns; and strive to be sustainable and fiscally viable without OMH support by the end of the two-year grant period.

- In addition, all 21 new service demonstration projects are testing their approaches to providing integrated care for the elderly in times of extraordinary change in health care. The lessons learned and innovative practices they identify in these times of change are expected to continue to inform planning for many others seeking to provide integrated health services and supports during for older adults in New York State.

## APPENDIX

### Program Evaluation Findings: Data

OMH staff in the Office of Performance Management and Evaluation conducted a program evaluation of all seven first round health integration projects (2007-2012). Designed to be both formative and summative in nature, the evaluation included two major components.

- One component focused on program design and implementation. The goal was to describe each of the project models and document lessons learned in implementation, integration of service delivery, and sustainability. These evaluation findings are summarized above in Section IV of this report.
- The second component focused on the collection of individual-level data to describe the volume and characteristics of those served by the projects and capture outcomes for those who received treatment. These evaluation findings are summarized below.

Submitted to OMH monthly, data on individuals served were collected at time of initial screening and assessment and at three month follow-up intervals (no individually identifiable health information was submitted). Data were regularly shared with the projects during individual calls, monthly group conference calls, and quarterly face-to-face learning collaborative meetings.

### Screening, Assessment, and Treatment

- All the health integration projects implemented mental health screening protocols for their primary care patients and reported the results through September 30, 2011.
- A total of 10,404 individuals were screened, and 80 percent of them (8,283) were age 60 or older. A total of 17,678 screenings were conducted (many individuals were screened more than once), and 80 percent of them were for those age 60 or older.
- Of the 8,283 individuals age 60 or older who were screened, 35 percent of them (2,893) were recommended for a more in-depth mental health assessment, and 73 percent of those individuals (2,123) received one.
- Of the 2,123 individuals age 60 or older who received a mental health assessment, 91 percent of them (1,941) were recommended for mental health treatment.
- Twenty three percent of individuals age 60 or older who were originally screened were recommended for mental health treatment. The 23 percent figure is a reasonable estimation of the prevalence of mental illness for individuals age 60 or older in these service demonstration projects.
- Based on data in follow-up evaluations, a total of at least 1,158 individuals of different ages received mental health treatment. Fifteen percent of them received pharmacotherapy only,

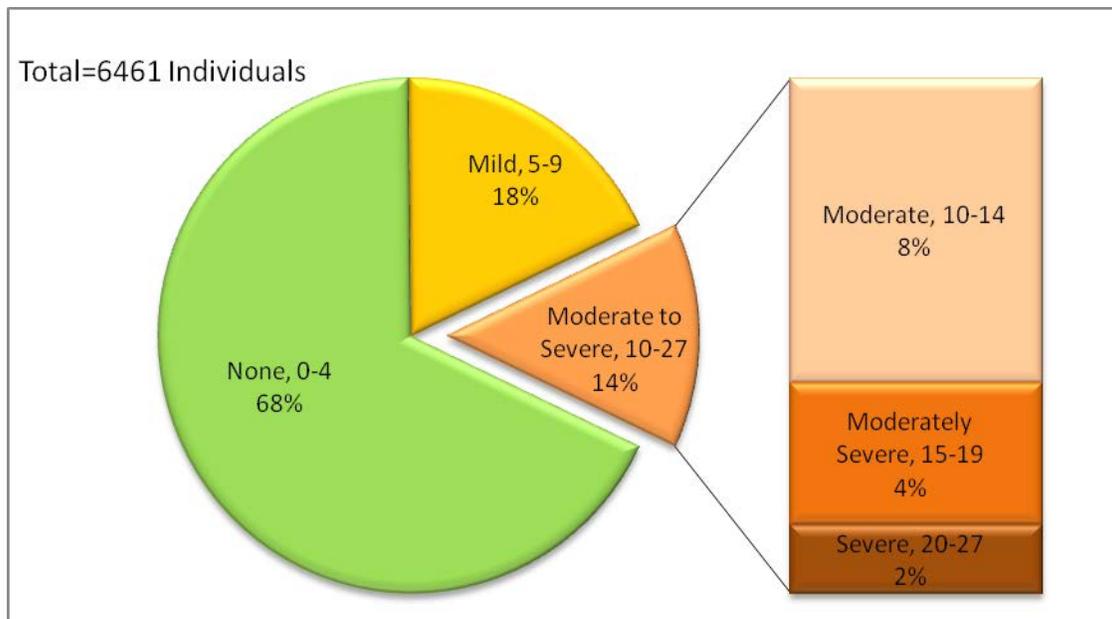
11 percent received verbal therapy only, and 23 percent received both pharmacotherapy and verbal therapy. Fifty one percent received treatment categorized as “other,” most of them from Flushing Hospital Medical Center, which implemented a health integration program based largely on the principles of Lifestyle Medicine.

### Screening for Depression and Anxiety

The health integration projects administered the nine-item Patient Health Questionnaire (PHQ-9) and the seven-item Generalized Anxiety Disorder (GAD-7) to help assess the severity of their patients’ symptoms of depression and anxiety and, for those receiving project follow-up assessments, to monitor response to treatment.

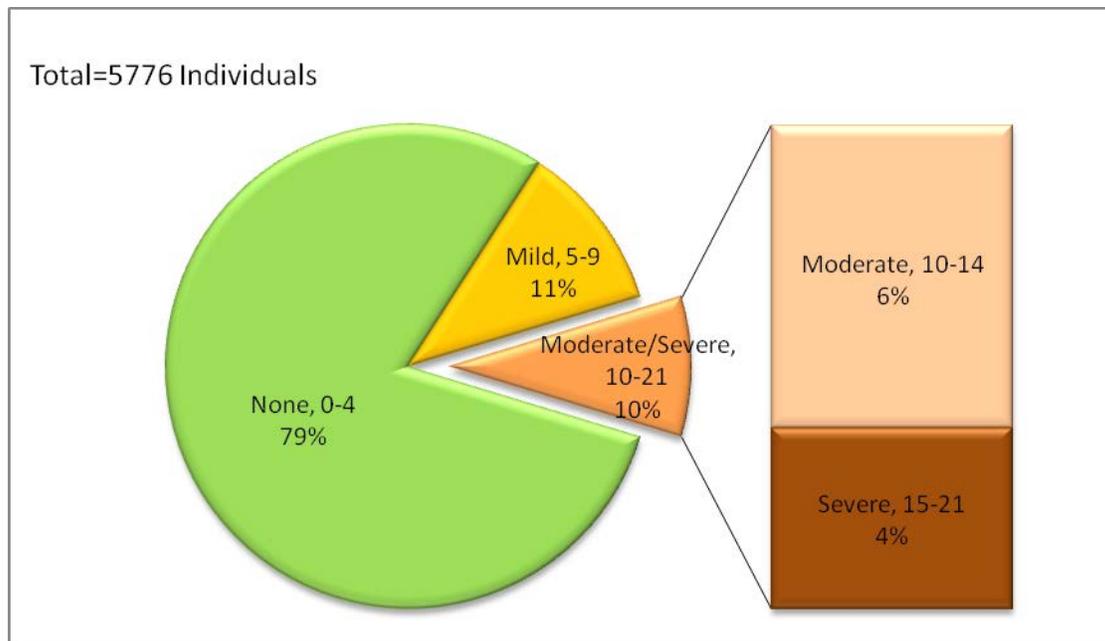
- Figure 1 shows the initial distribution of PHQ-9 scores by five depression symptom severity categories: None (0-4), Mild (5-9), Moderate (10-14), Moderately Severe (15-19), and Severe (20-27). A total of 6,461 individuals age 60 or older were screened for depression using the PHQ-9, and 32 percent of them had scores of five or greater. Eight percent scored in the 10-14 range and could be considered as suffering from minor depression or mild major depression. Four percent had scores that ranged from 15-19 and could be characterized as exhibiting moderately severe major depression, while 2 percent had scores that ranged from 20-27 and could be characterized as having severe major depression.

**Figure 1**



- Figure 2 illustrates the initial distribution of GAD-7 scores by four anxiety symptom severity categories: None (0-4), Mild (5-9), Moderate (10-14), and Severe (15-21). A total of 5,776 individuals age 60 or older were screened for anxiety using the GAD-7, and 21 percent of them had scores of five or greater. Six percent had moderate symptoms of anxiety with scores that ranged from 10-14, while 4 percent had severe symptoms of anxiety with scores that ranged from 15-21.

**Figure 2**



### Demographic Characteristics

Data captured demographic characteristics of those engaged by the health integration programs, including the following data for all individuals screened and all individuals recommended for mental health treatment.

- **Gender:** Sixty four percent of those screened were women. Similarly, 70 percent of those who were subsequently recommended for treatment were women. The rate of individuals recommended for treatment as a percentage of individuals screened was higher for women (28 percent) than for men (20 percent).
- **Age:** Eighty percent of those screened and 74 percent of those recommended for treatment were age 60 or older. The screening of younger individuals in several programs showed that those age 50-59 were nearly twice as likely as older adults to be recommended for treatment.
- **Race/Ethnicity:** Individuals most frequently screened were White/non-Hispanic (71 percent) and Hispanic (17 percent); they were also those most frequently recommended for treatment. Individuals who showed the highest rates of recommendation for treatment were Asian (65

percent) and Hispanic (46 percent). Race and ethnicity distribution varied greatly by program site.

- **Housing:** Eighty one percent of those screened lived in private residences, either alone (29 percent), with a spouse or partner (36 percent), or with other family (16 percent).

### Assessment of Needs

Clinicians in the health integration projects conducted an assessment of patient needs in 11 need areas (Mental Health, Physical Health, Cognitive, Housing, Substance Abuse, Financial/Benefits, Social Isolation, Abuse, Legal, Self Harm/Suicide, and Self Neglect). They used a set of definitional anchors to guide their judgments and rated levels of need as High, Moderate, Low, Not Applicable, or Other.

- For the 2,332 individuals age 60 or older whose needs were assessed, Table 1 shows the number and percentage of those with identified needs (high, moderate, and low levels of need combined) in each of the 11 need areas.

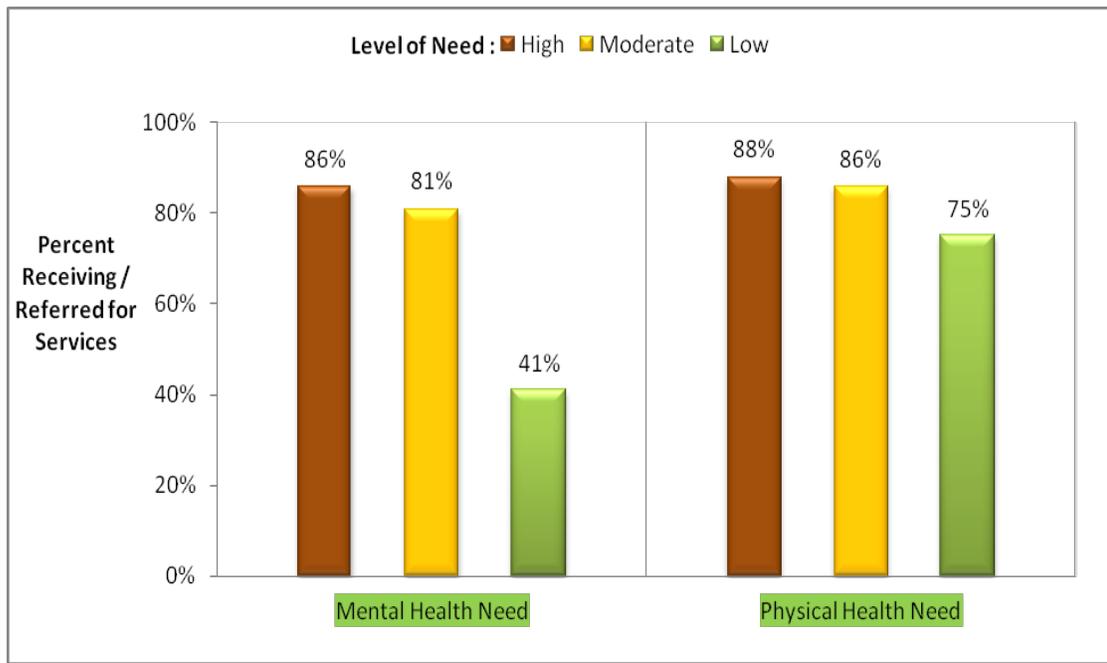
**Table 1**

<b>Profile of Needs</b>		
<b>Need Area</b>	<b>Number of Individuals</b>	<b>Percent of Individuals</b>
Mental Health	2,019	87%
Physical Health	1,951	84%
Cognitive	649	28%
Housing	330	14%
Substance Abuse	150	6%
Financial/Benefits	323	14%
Social Isolation	521	22%
Abuse	94	4%
Legal	131	6%
Self Harm/ Suicide	234	10%
Self Neglect	259	11%
Number of Individuals Assessed	2,332	

- Mental health was the most frequently identified need. Fifteen percent of those with mental health needs were rated as high need, 45 percent as moderate need, and 27 percent as low need. Eighty six percent of those whose level of need was high were either receiving services or referred for services, as were 81 percent of the moderate and 41 percent of the low need populations.

- Physical health was the second most frequently identified need. Similarly, 15 percent of those with physical health needs were rated as high need, 47 percent as moderate need, and 22 percent as low need. Eighty eight percent of those whose level of need was high were either receiving services or referred for services, as were 86 percent of the moderate and 75 percent of the low need populations.
- Figure 3 illustrates the percentage of those receiving services or referred for services by level of mental health and physical health need.

**Figure 3**



### Diagnoses

- There were 1,586 assessments with known diagnoses for individuals age 60 or older.
- Depression was diagnosed 71 percent of the time, anxiety disorders 35 percent of the time, and dementia 18 percent of the time (there were more diagnoses than assessments because a number of individuals were diagnosed with more than one disorder).
- Regarding diagnostic co-morbidity, depression and anxiety were diagnosed 24 percent of the time; depression and dementia 6 percent of the time; and depression, anxiety, and dementia 3 percent of the time.

## Change in Symptoms of Depression and Anxiety

Outcomes of treatment on symptoms of depression and anxiety were measured using the PHQ-9 and the GAD-7. Change on the PHQ-9 was evaluated as change in depression severity category (Mild, Moderate, Moderately Severe, Severe) between initial screening and most recent follow-up assessment.

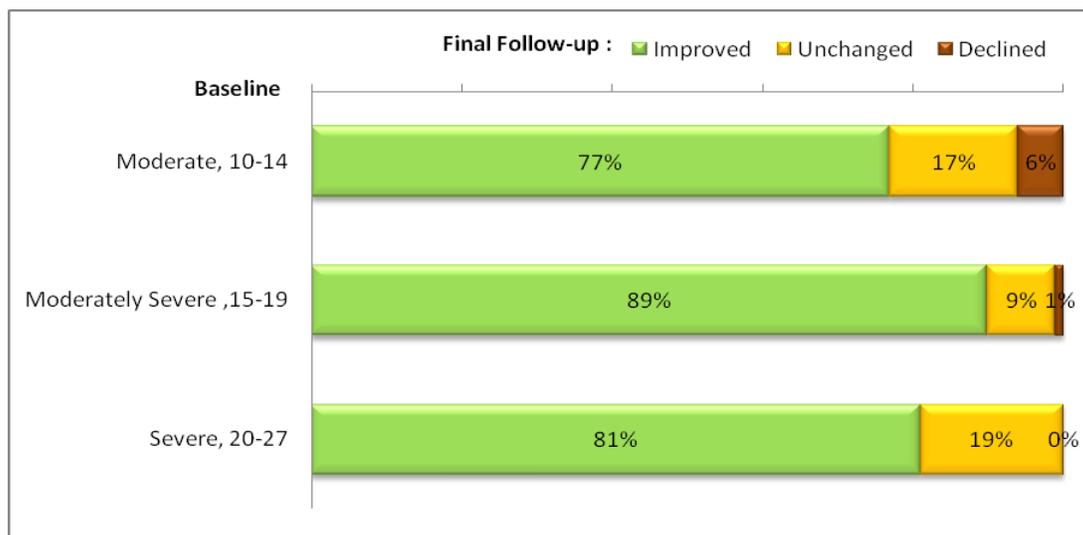
- Table 2 shows the distribution of PHQ-9 scores for individuals age 60 or older at their most recent assessment and indicates whether the scores represent improvement, no change, or worsening symptoms. Those who improved the most were individuals with moderately severe symptoms of depression (89 percent).

**Table 2**

Changes in Symptoms of Depression at Most Recent Assessment								
PHQ-9 Score	Depression Severity	Improved		Unchanged		Declined		Total
		N	%	N	%	N	%	
0-4	None	0	0%	382	87%	58	13%	440
5-9	Mild	135	53%	90	35%	31	12%	256
10-14	Moderate	121	77%	26	17%	10	6%	157
15-19	Mod Severe	67	89%	7	9%	1	1%	75
20-27	Severe	21	81%	5	19%	0	0%	26
								954

- Figure 4 illustrates that high rates of improvement were seen for those who had moderate, moderately severe, and severe depressive symptoms on initial screening.

**Figure 4**



Change on the GAD-7 was evaluated as change in anxiety severity category (Mild, Moderate, Severe) between initial assessment and most recent follow-up assessment.

- Table 3 shows the distribution of GAD-7 scores for individuals age 60 or older at their most recent assessment and indicates whether the scores represent improvement, no change, or worsening symptoms. Those who improved the most were individuals with severe symptoms of anxiety (86 percent), followed by those with moderate symptoms (80 percent) and mild symptoms (54 percent).

**Table 3**

Changes in Symptoms of Anxiety at Most Recent Assessment								
GAD-7 Score	Anxiety Severity	Improved		Unchanged		Declined		Total
		N	%	N	%	N	%	
0-4	None	0	0%	331	90%	38	10%	369
5-9	Mild	72	54%	47	35%	14	11%	133
10-14	Moderate	63	80%	13	16%	3	4%	79
15-21	Severe	36	86%	6	14%	0	0%	42
								623

- Figure 5 illustrates that high rates of improvement were seen for those who had moderate and severe anxiety symptoms on initial screening.

**Figure 5**

