STRIVE Staff Time and Resource Intensity Verification

Technical Expert Panel Meeting
December 1, 2005
STRIVE@IFMC.ORG

Welcome & Introductions

- Jean Eby, Director, lowa Foundation for Medical Care
- Kathy Langenberg, R.N.,
 STRIVE Operations Manager,
 Iowa Foundation for Medical Care
- Dane Pelfrey, STRIVE Project Manager, lowa Foundation for Medical Care

Welcome & Introductions

- Bob Burke, Ph.D.,
 STRIVE Project Director,
 The George Washington University
- Brant Fries, Ph.D., STRIVE Analytic Task Lead, University of Michigan
- Bob Godbout, Ph.D.,
 STRIVE Survey Design Consultant, Stepwise
- Dave Malitz, Ph.D.,
 STRIVE Survey Design Consultant, Stepwise
- Dave Oatway, R.N., M.P.H.,
 STRIVE Database Manager, CareTrack

Geographic Distribution of Project Team

- IFMC is based in West Des Moines, Iowa with offices in Owings Mills, MD
- George Washington University, Washington, DC
- University of Michigan, Ann Arbor, MI
- CareTrack Systems, Key West, FL
- Stepwise Systems, Austin, TX

Welcome & Introductions

- TEP Participant Introductions
- Procedures for the day
- Format
- Amenities
- Phones place on vibrate
- End at 4:00 p.m.
- Contact STRIVE@IFMC.ORG

STRIVE Goals

- Enhance efficiency and accuracy of the RUGs system
- Reflect changes in health care practices since implementation of SNF PPS
- Design payment to promote quality

TEP Objectives

- Understand scope of STRIVE Project
- Obtain Stakeholder Input:
 - Project Goals
 - Critical Issues
 - Technical Issues

Agenda

- Welcome & Introductions
- Study Design / Overview
 - TEP Discussion Study Design
- Data Collection / Facility Recruitment
 - TEP Discussion –Data Collection / Facility Recruitment
- Lunch / Data Collection Demonstration
- Analysis & Sampling Plans
 - TEP Discussion Analysis & Sampling Plans

Agenda, continued

- Special Populations & Supplemental Data Items
 - TEP Discussion –
 Special Populations &
 Supplemental Data Items
- Observer Comment Period
- Adjourn

- Omnibus Budget Reconciliation Act of 1987
 - Development of uniform assessment instrument, based on a minimum data set to improve facility care planning and resident outcomes
- Balanced Budget Act of 1997
 - SNF moves to PPS system in 1998, many states use the case-mix payment system for Medicaid reimbursement

- The case mix system at the core of the Medicare SNF PPS consists of three components:
 - Staff time measures (STM)
 - Resident assessments
 - Cost calculations of resources
- Resource Utilization Groups
 - RUG-III
 - Each group represents a level of resource utilization and is quantified with a case mix index score
 - Links resource utilization to payment rates

- RUG-III classification system was designed by relating resident characteristics to wage-weighted staff time
- Information regarding a resident's characteristics was derived from the MDS resident assessment instrument

- Nearly 50 percent of states use a version of the RUG classification system to pay for Medicaid nursing home care
- Both the Federal and state systems are based on staff time measurement data collected in 1990, 1995, and 1997

No national time study has taken place since 1997

STRIVE

 On September 30, 2005, CMS awarded a contract to Iowa Foundation for Medical Care (IFMC) and its partners to conduct this study

Scope of Work

- STRIVE project team will implement and manage CMS's multi-state STM study including the following tasks:
 - Establish TEP
 - Recruit nursing homes, state agencies, and volunteers to participate
 - Provide hardware, software, and training to obtain the data in a useable form
 - Coordinate data collection through pilot test and national time study
 - Analyze data

Analytic Approaches

- Resource use for Medicare and Medicaid
- Resource use for special populations
 - e.g., ventilator
- Ancillary costs
 - e.g., drug costs
- Alternative items and measures
 - e.g., MDS 3.0, MDS-PAC
- Skilled service patterns
 - e.g., IV meds, therapy patterns
- Potential collaboration with other studies
 - DVA, Canada

Sampling Approaches

- Large nationally representative sample (about 12,000 residents)
- Stratified random sample of facilities within state
- Medicare and special population strata
- Facility screening based on survey deficiencies and QI/QM measures

Data Collection State / Facility Roles

Dave Oatway, R.N., M.P.H. Kathy Langenberg, R.N. Bob Burke, Ph. D.

Goals of Data Collection

- Accurate resource use data
 - Collect time data with most current and tested technology
 - Use normal staff levels and resident loads
 - Reflect current practices
- Accurate assessment data
 - Reflect current resident characteristics

Data Collection

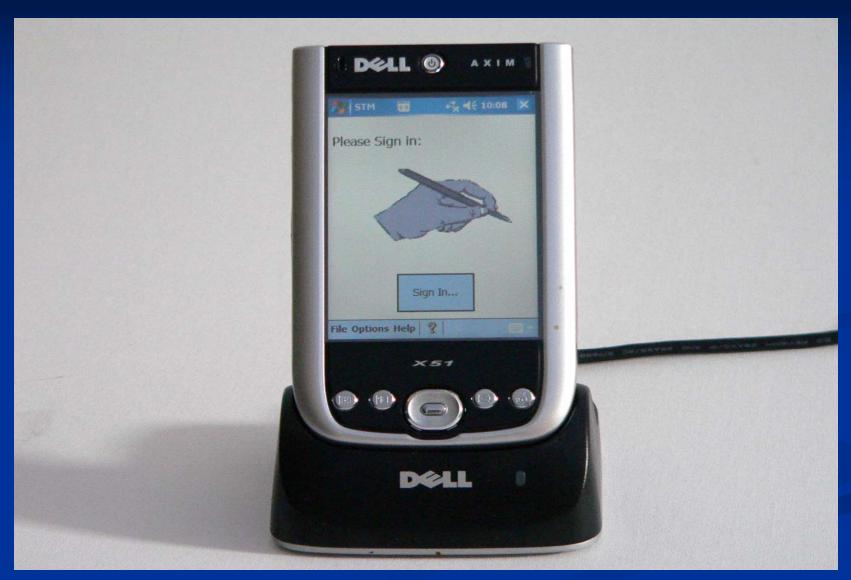
- Types of data to be collected
 - Time data from staff
 - Additional resources used for resident care
 - Drugs/Medications
 - Supplies
 - Services
 - Resident Characteristics
 - MDS 2.0
 - Supplemental items

Privacy

- Resident level data not shared or available outside of the project
- Study conducted in compliance with HIPAA standards
- Staff data not shared with facility
- Data protected

Time Data Collection

- Collect time from all direct care staff
 - PocketPC running the CareTrack Staff Time software
 - Paper backup available for technical problems
 - Individual and group times
- PocketPC time data collection is very easy to learn and use, and is reliable and accurate



Resident Specific Time

- Resident Specific Time (RST)
 - Time staff members spend with or on behalf of a resident
 - Therapists identify the modality by selecting HCPCS code

Non-Resident Specific Time

- Non-Resident Specific Time (NRST)
 - Time staff members spend supporting the delivery of care
 - Administrative duties
 - Cleaning
 - Training
 - Corporate activities

Meals and Breaks

- Meals and Breaks
 - Time staff member's spend on personal meals and breaks

Additional Resources Used to Care for Residents

- Identify and Document
 - Drugs/Medications
 - Supplies
 - Services

Resident Assessment

- Complete/update hardcopy MDS 2.0 with an assessment reference date during the time study
- Collect supplemental assessment items on paper
- Send to IFMC for data entry

Facility Characteristics

- Demographics
- Administration, ownership
- Names, types, sizes of nursing units
- Staffing levels

Data Collection Roles

Dave Oatway, R.N., M.P.H.

State Roles

- Designates state project lead
- Recruits facilities
- Recruits staff for on-site data collection and monitoring
- Trains staff
- Schedules facilities and staff
- Monitors data collection
- Support provided by IFMC

Stakeholder Roles

- Supports study goals
- Encourages study participation
- Communicates issues and concerns
- Provides volunteers for data collection

Facility Roles

- Participates in study
- Prepares staff for study
- Provides staff and resident rosters
- Collects staff time and resource data
- Collects assessment data
- Provides work space as needed

IFMC Roles

- Overall STRIVE lead
- Supports State Recruitment
 - Trains state project staff
 - Provides sample facility list
 - Supplies recruitment materials and protocols
 - Maintains recruitment information
 - Assists in recruitment as needed
- Supports State Study
 - Supplies study materials and protocols
 - Supplies laptops and PocketPCs
 - Provides help line and study support

Data Collection Summary

- Data collection performed by states, with assistance provided by IFMC
- Fully trained volunteers create partnerships and keep the process transparent to the stakeholders

Analysis Plan and Sampling Plan

Brant Fries, Ph.D.

David Malitz, Ph.D.

- Recalibrate CMI for current RUG-III Systems
 - Use full sample (N=12,000)
 - 34, 44, 53 group systems
 - Possibly several CMIs: Medicare, Medicaid, DVA

Analytic Approach

Clinical Input Resident Characteristics **Resource Cost Statistics**

- Test RUG-III modifications
 - Structure of RUG-III
 - e.g., "Rehab+Extensive"
 - e.g., "leafy-end splits"
 - Classification of special populations
 - e.g., ventilator/respirator
 - Effect of changing RUG-III criteria
 - e.g., use of known scales
 - e.g., IV medications before/after NH admission
 - e.g., additional qualifiers
 - Incorporation of new assessment items

- Test RUG-III modifications (cont.)
 - Update RUG-III service-based measures
 - e.g., physician orders/visits
 - Effect of assessment schedule
 - Effect of additional cost measures

- Other issues:
 - Reliability of any new assessment items
 - Skilled service patterns
- Potential collaboration with DVA
- Potential collaboration with Canadian study

Sampling Design

- Stratified, random sample of facilities within volunteer states
- Stratification will insure adequate representation
 - Medicare residents
 - Special populations
 - Hospital-based facilities
- Facility exclusions
 - Poor quality
 - Unable to participate
 - e.g., emergencies, legal action

Sampling Plan

- Sample size
 - Target: 15 states, 240 facilities, 12,000 residents
 - Selected facilities will include all units (except large facilities)

Stratification of Facilities

Excluded Facilities

General population: Medicare

General population: Other

Special population 1

Special population 2 (...)

Special population k

Sampling Methodology

- Step 1. Data-based exclusions using administrative data
 - OSCAR deficiencies
 - Quality Indicators (QIs) and Quality Measures (QMs)
- Step 2. Select sample from remaining facilities (over-sample)
- Step 3. Stakeholder exclusions from list of sampled facilities

Facility Exclusions

- Development of data-based exclusions
 - Discussions with QI/QM experts
 - Measures to include
 - Combining measures
 - CMS algorithm for scoring survey and complaint deficiency history
- Stakeholder exclusions

Analysis Plan and Sampling Plan

TEP Discussion

Special Populations and Supplemental Data Items

Bob Godbout, Ph.D. Brant Fries, Ph.D.

Special Populations

- Criteria for inclusion on list
 - Group is of high interest
 - Practice patterns have changed
 - Strengthens model
 - Group is rare (prevalence <0.5%)
- Special Population Matrix

Ancillary Cost Measures

- Some measures collected directly, some as part of assessment
- Bundled vs. unbundled service
- Examples
 - IV drugs/ IV medications
 - Hyperbaric oxygen
 - Barium swallows

- Bundled only for Medicare Part A stays
- With NDC codes, can attach price/cost per dose (need advice)
- HIPAA & privacy concerns
- Costly to collect

- Collect what is:
 - Ordered?
 - Dispensed?
 - Taken?
- Data collection options:
 - Medicare / Medicaid bills
 - High cost drugs
 - All drugs
 - All drugs for a sample of residents

- Collection Approach: Medicare bills
 - Identify bills related to drugs, link to other cost data
 - Pros:
 - Does not require primary data collection
 - Cons:
 - Drugs not identified
 - Only possible for Medicare residents
 - Difficult to identify appropriate bills (time frame)
 - Delay in getting complete bills

- Collection Approach: High cost drugs
 - Locate database with daily cost by drug, pick drugs in top % (e.g., 2%)
 - Facility or STRIVE project staff code drug/frequency/dose received by resident
 - Pros:
 - Focus on drugs most likely at issue
 - Reduces data collection effort (few residents receive)
 - Cons:
 - List of high-daily-cost drugs could be very long
 - Need to find database to identify high-daily-cost drugs
 - High-daily-cost drugs may be used infrequent High cost drugs change over time
 - Time consuming to check list

- Collection Approach: All drugs for Medicare A
 - Alternative approaches:
 - Staff enter drug data directly into database (with lookup)
 - Printout sent to IFMC for entry
 - Drug database sent from facility/pharmacy to IFMC
 - Need NDC codes
 - Pros:
 - Have all drugs, can do any analysis needed
 - Cons:
 - Each alternative data collection/coding method is timeconsuming

- Collection Approach: All drugs for sample of Medicare A residents
 - Collect in facilities where data are available
 - Methods similar to "All drugs"
 - Pros:
 - Same as before
 - Less expensive, as only doing for part of sample
 - Cons:
 - Same as before
 - Facilities with this capability may create a biased sample
 - May not have sufficient sample size for some analyses

Other Cost Data Issues

- Collection of some supplies/services straightforward
 - Collect selected items as part of assessment (include volume)
- Similar collection issues for some other high-cost supplies
- What is <u>daily</u> cost for a supply with no specified time period
 - e.g., pressure-relieving bed

Supplemental Assessment Items

- Sources:
 - Refine MDS 2.0 items
 - e.g., IV medications
 - Other MDS instruments
 - e.g., MDS V3.0, MDS-PAC
 - Other assessment systems

Supplemental Assessment Items

- Criteria for choosing
 - Expected influence on case mix
 - Cannot be "gamed"
 - Can be audited
 - Quality of item (specification, training material)
 - Difficulty to obtain data
 - Existing reliability study

Reliability Studies

- New assessment items
 - Standard inter-rater reliability approach
 - Limited to *new* untested items
- Reliability of ancillary cost measures

Skilled Service Patterns

- Services before or after SNF admission
 - e.g., IV medications, suctioning
- Therapy patterns and RUG break points
- Therapy modalities

Special Populations and Supplemental Data Items

TEP Discussion

STRIVE TEP - Next Steps

- TEP slides posted on CMS Website
 - www.cms.hhs.gov/providers/snfpps (available later this month)
- TEP comments due by 12/22/05
 - Strive@ifmc.org
- Participate in follow-up teleconferences

Open Discussion - Observers

- Please take a position in line near the front table
- Please limit questions and comments to 2 minutes

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Thank you for your participation attendance