Welcome & Introductions

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

- **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
Historical Background

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.
Historical Background

- 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.
Historical Background

- No national time study has taken place since 1997
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 usable 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 focused
- 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

Iowa Foundation for Medical Care

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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.
Analytic Goals

- 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

Resource Cost

Statistics

RUG-III
Analytic Goals

- 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
Analytic Goals

- 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
Analytic Goals

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
Issues in Collecting Drug Data

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

Collect what is:

- Ordered?
- Dispensed?
- Taken?

- Data collection options:
  - Medicare / Medicaid bills
  - High cost drugs
  - All drugs
  - All drugs for a sample of residents
Issues in Collecting Drug Data

- **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
Issues in Collecting Drug Data

- **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
Issues in Collecting Drug Data

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 time-consuming

Alternative approaches: With lookup
- 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 time-consuming
Issues in Collecting Drug Data

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 daily 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