CalPERS Reference Pricing Program for Hip or Knee Replacement

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About CalPERS

- Health plan benefits for 1.38 million members
  - State of California and more than 1,200 public agencies and schools
- Spend $7.5 billion annual expenditures
- About 1/3rd of Basic Health Plan members in one of three self-funded Preferred Provider Organizations

- CalPERS Health Care Decision Support System
  - 10 years of data and almost 1 Billion records
  - Hosted and managed by Truven Health Analytics
  - Includes Health and Drug Claims, Eligibility, Premiums, Disease Management, Lab Results (partial), Biometric (partial) and Capitation (partial)
  - Allows assessment of cost, utilization and health outcomes
HOW DID CalPERS DECIDE TO START A HIP AND KNEE REFERENCE BASED PRICING PROGRAM? – A TALE OF TWO STUDIES
Background

• Two studies done
  – Similar but different in focus
  – Study on population health using data warehouse
    • Identified cost drivers and sub-categories
  – Study on cost variation using data warehouse
    • Focused on regional variation in the big cost driver areas
• Different missions but complementary
CalPERS cost drivers

- Muscle/Bone Disorders highest at 13% of costs
- Osteoarthritis – approximately one third of total musculoskeletal costs

Source: CalPERS, 2008.
Studies conclusions

- Osteoarthritis is a cost driver
  - Hip and knee replacements account for about 1/3rd of cost
  - Deeper analysis showed
    - Osteoarthritis had highest annual cost increase for 2005 to 2008 (39%)
    - Nearly all osteoarthritis costs occurred in members over 40
    - Wide treatment cost variations within regions
  - Hospital cost and utilization are not linked to quality or evidence-based outcomes
REFERENCE BASED PRICING PROGRAM
Hip or Knee replacement and reference based pricing

• Reference Pricing is a benefit design element
  – Similar to reverse deductible with insurer paying the first part of total allowed charge and enrollee pays the remainder
  – Price transparency to enrollee

What makes a hip or knee procedure a good candidate for reference based pricing program?

✓ Variation in cost in same markets without a difference in quality
✓ Procedures can be scheduled (elective, non-emergency)
  • Preference sensitive - patient can decide where, when, and how they want the procedures to occur
✓ Procedures are performed in sufficient volume at designated facilities
Description of program

• CalPERS and Anthem Blue Cross of California
  – Reference based purchasing program for total knee replacement & total hip replacement
  – 46 facilities met quality, cost and geographic requirements
    • Volume requirement of 10 replacements in each category in previous 18 months
    • Designated facilities had better quality results than overall
    • Examined Surgical Infection Prevention Data submitted to the Joint Commission as well as Wellpoint’s proprietary hospital performance scoring methodology
    • Threshold facility payment of $30,000 for routine single knee and hip joint replacement hospital stays
  – Started January 1, 2011
  – Outreach with providers and orthopedists

• Members received a letter describing the program and a brochure listing all 46 designated facilities in California
  – Information on pre-certification letter
Why choose $30,000 for allowed charges?

- High volume, high quality facilities with geographic dispersion were charging less than $30,000

EVALUATION RESULTS OF PROGRAM --
TALE OF TWO MORE STUDIES
Quality and cost savings

• Value based purchasing design facilities had:
  – A significantly lower general complication rate in 30 days
  – A significantly lower 30-day general infection rate
  – Similar follow-up admission rates

• Patient experience part of study still finishing up

• Program credited with cumulative savings of $5.5M over first two years
  – Average hip/knee replacement price charged declined 26% or over $9,000 per procedure
Allowed charges for the hip or knee replacement pre- and post-implementation of value based purchasing design program

Average prices charged for knee or hip replacement surgery by facility type, 2008-2012

$15,000
$20,000
$25,000
$30,000
$35,000
$40,000
$45,000

2008 2009 2010 2011 2012*

PERS Non-VBPD
Non-PERS Non-VBPD
PERS VBPD
Non-PERS VBPD

Source: University of California, Berkeley analysis, June 2013.
*Through September 2012 only. VBPD: Value Based Purchasing Design facility
CONCLUSION AND CONSIDERATIONS
Conclusions and implications of the cost and quality studies

• A hospital market story and a consumer enrollee story
  • Reference pricing induced enrollees to use lower-priced facilities but the bigger effect on hospital prices

• Expansion of participating hospitals from 46 to 61

• Clinical quality improved for members as whole
Reference pricing expansion

• CalPERS has expanded reference to inpatient procedures for cataract surgery, colonoscopy, arthroscopy

• Key consideration checklist
  ✓ Regional cost variation and variation within region
    – Ambulatory surgical centers had substantial lower costs than inpatient facilities
  ✓ Volume and focus may increase quality
    – Evidence that ambulatory surgical centers had as good or better quality from literature
  ✓ Can be scheduled
  ✓ Substantial cost
Considerations for reference pricing expansion

• Other procedures meet various criteria but difficult for CalPERS to implement
  – Spinal fusion/lower back disorders

• Other potential areas include
  – Various diagnostic imaging
  – A deeper study of price variation

• Improve consumer education/engagement
  – Targeted information