Procedural Payment Bundles

Case Study in Radiation Oncology

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- Independent, privately-held provider of multispecialty cancer care services
- > 900 physicians across all practice settings and specialties related to cancer care
- Radiation oncology service line
  - 180 facilities (50 hospital-based) in 17 states
  - 34,000 new cases annually
  - ~10% revenues follow alternative payment agreements

Why Radiation Therapy?

- Common cancer treatment: 60% of all cancer patients receive radiotherapy
- Care episodes have sharply defined starts and endpoints over a relatively short period of time
- Acute complications requiring ER and inpatient management are rare
- Multiple treatment options: many cancers may be treated from a broad selection of technologies at varying costs

Variety of Radiotherapy Options

radiosurgery

conventional radiotherapy

proton therapy

HDR brachytherapy

“seeds” brachytherapy

Variations in Cost

Example: Prostate Cancer

Prostate cancer is the most common diagnosis treated with radiation therapy. Each treatment option is clinically valid but at greatly variable procedural cost.

	payments to radiotherapy provider and facility	payments to hospital or ASC
conventional radiotherapy	$28,000	none
radiosurgery	$18,000	none
seeds brachytherapy	$4,500	highly variable
HDR brachytherapy	$12,000	highly variable
proton therapy	$59,000	none

all payments are per 2016 CMS PFS and OPPS

FFS Limitations

FFS payments reimburse largely on the basis of equipment costs and time

- Significant cost variation among different treatment options for the same condition invites utilization management, creating inefficiencies for both payer and provider
- FFS payments are misaligned with (1) the overall clinical effort needed to treat common cancers and (2) outcomes

21C Bundle Design

Bundled Payment Model Should Be As Inclusive As Possible

- Payment schedule includes all common cancer diagnoses and services, covering > 98% of all radiotherapy episodes
- Commercial and Medicare Advantage products are included
- Multi-year terms with annual payer-provider reviews
  - utilization is assessed against contractual benchmarks to evaluate for possible underuse of services
  - pricing is updated per utilization changes observed in the prior term
  - additional services and insurance products are considered for inclusion

Bundled Payment Model Should Operate As Simply As Possible

- Full payment made immediately by the payer (less applicable deductible and co-insurance) upon receipt of claim that reports:
  - ICD-10 diagnosis code covered under the agreement
  - single trigger CPT code
- No inlier/outlier provisions or risk adjustments
  - same rate is paid regardless of the number of treatments or risk factors
- Separate bundled payments for multiple episodes
  - one caveat: if a patient requires treatment for a same diagnosis previously treated and reimbursed within the prior 90 days, then the payer does not make another payment to the provider

Bundle Development

Build care pathways for defined diagnosis groups

↓

Model costs for each pathway

↓

Determine diagnosis – pathways distributions

↓ price weighted-averaging

THE BUNDLE PRICE

Bundle Program Execution

- Reconciliations for incomplete procedures can occur quarterly
  - pro rata payments to payer
  - incomplete procedures are infrequent: 2% of all cases
- Services are reported using legacy claims management systems and pended for later comparisons to clinical benchmarks
  - CPT data are then analyzed for non-compliance (eg, under-utilization) to agreed benchmarks

Results

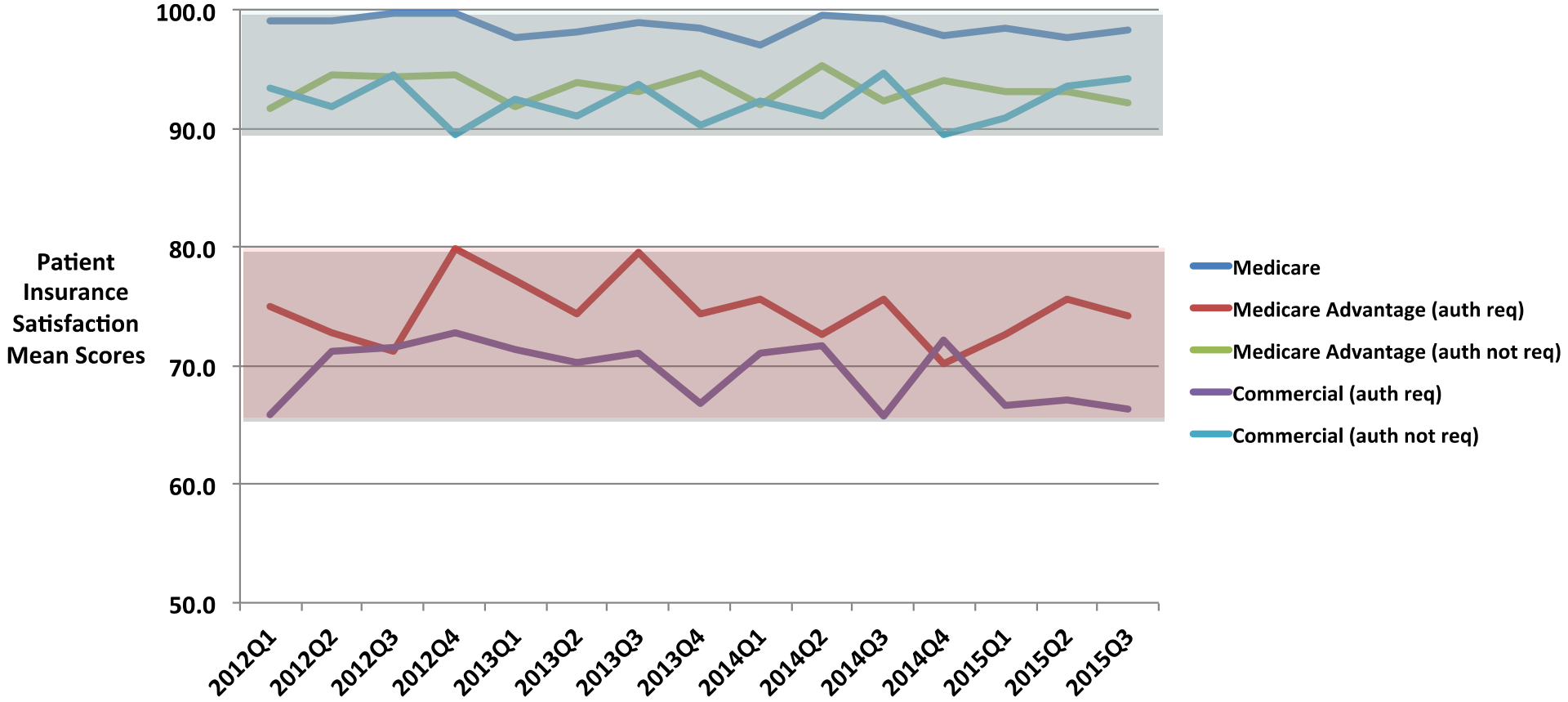
Patient Satisfaction

Costs of Care

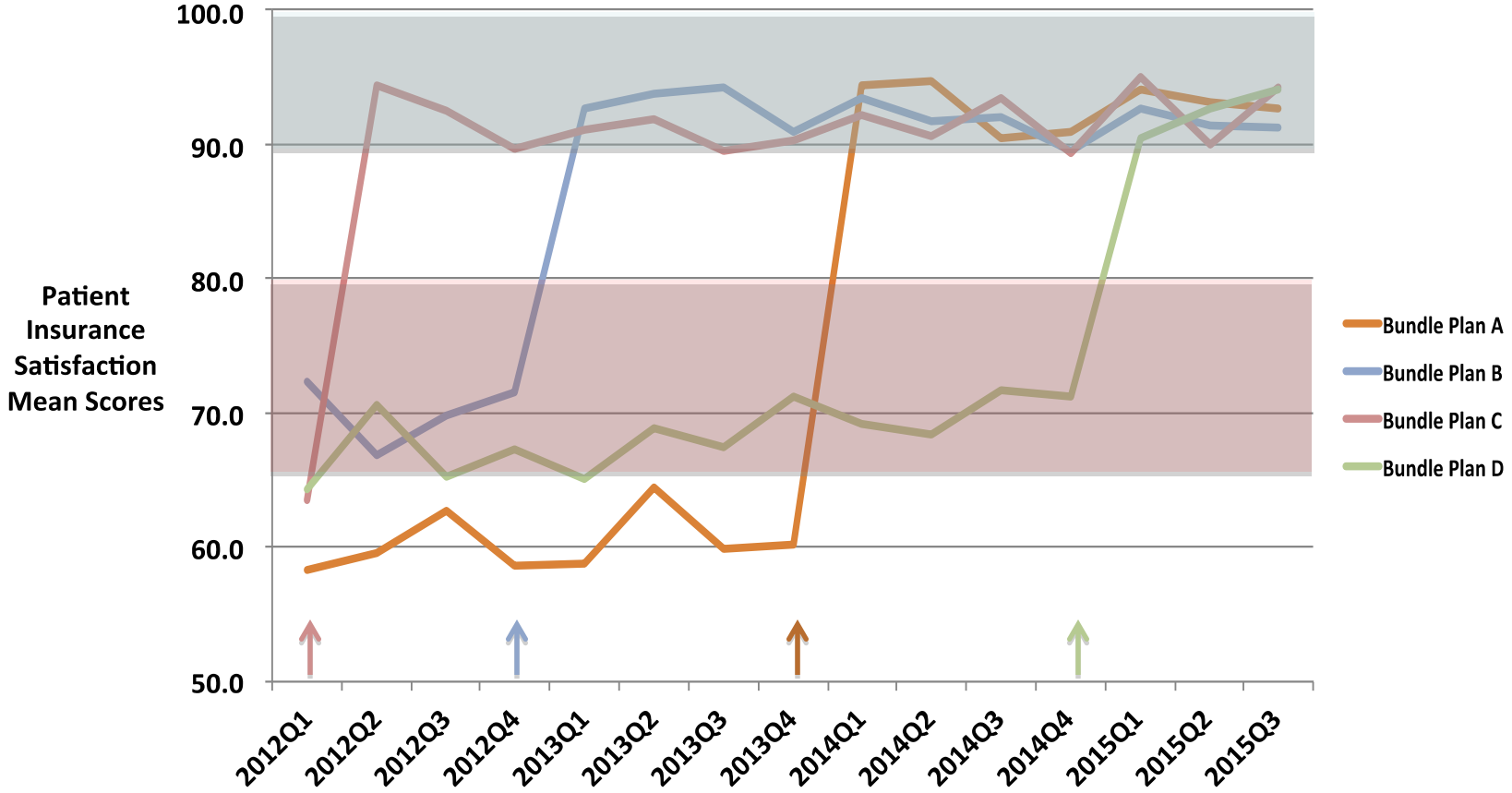
Patient Satisfaction

- Assessed independently by a leading patient satisfaction surveyor
- Patients answer 30 questions pertaining to various aspects of their overall care experience, including “insurance experience” (pre-auth delays, coverage of services, etc)
- Each answer is scored on a 0 – 100 scale
- Results: a significant difference in patient insurance satisfaction was found between the pre and post-bundle implementation reporting periods in favor of the post-bundle period (91.7 vs 66.4, $p < 0.001$)

Patient Satisfaction



Patient Satisfaction

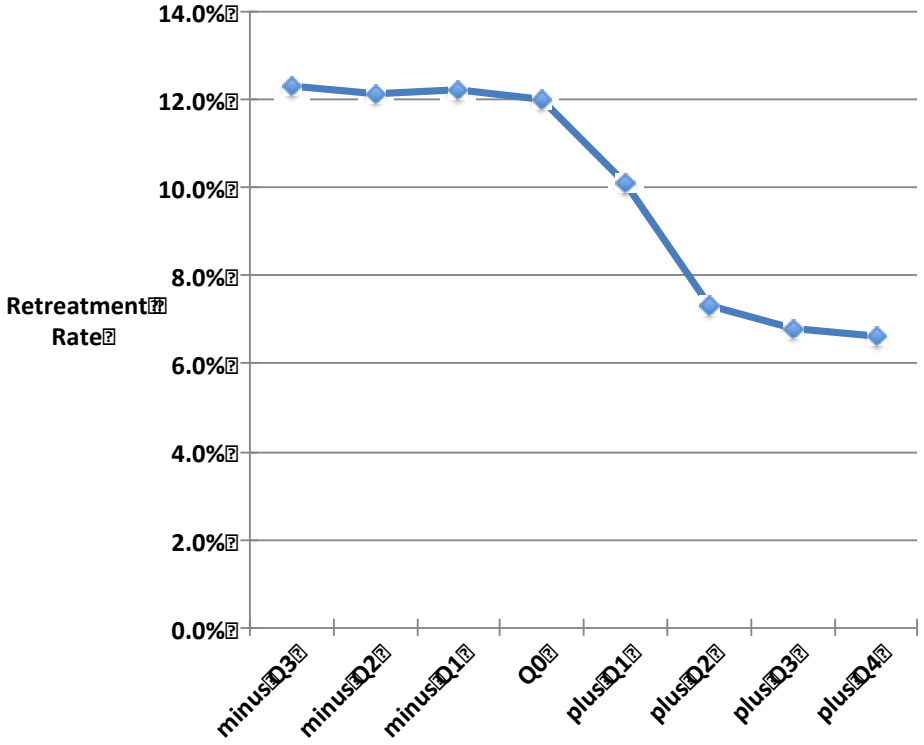


Costs of Care

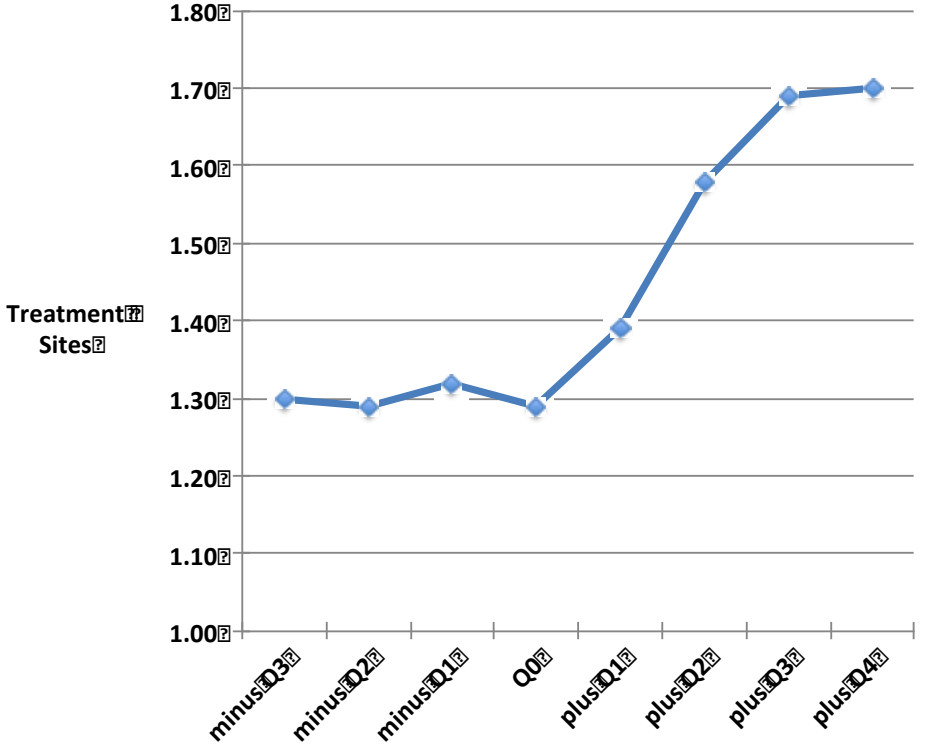
- Modest discounts over current episode care costs may be negotiated through bundled pricing
- Additional savings are realized through original payment coverage of repeat procedures involving a recently treated diagnosis (ie, within 90 days)
  - metastatic cases contribute 15 – 20% of all cases
  - examples: metastasis of bone, brain, lung and liver
  - episode care costs: $2,500 – 7,500 per case

Costs of Care

Same Diagnosis Retreatment within 90 Days



Mean Number of Treatment Sites per Episode



Principles of Success

- Keep the mechanics simple to ease implementation and maintenance
- Use existing claims management systems as much as possible
- Include as many services and procedures as possible within a bundle
- Develop bundle payment rates for as many diagnoses as possible to spread risk and simplify contract administration

THANK YOU

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