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Practical Considerations in Medical Malpractice Reserving

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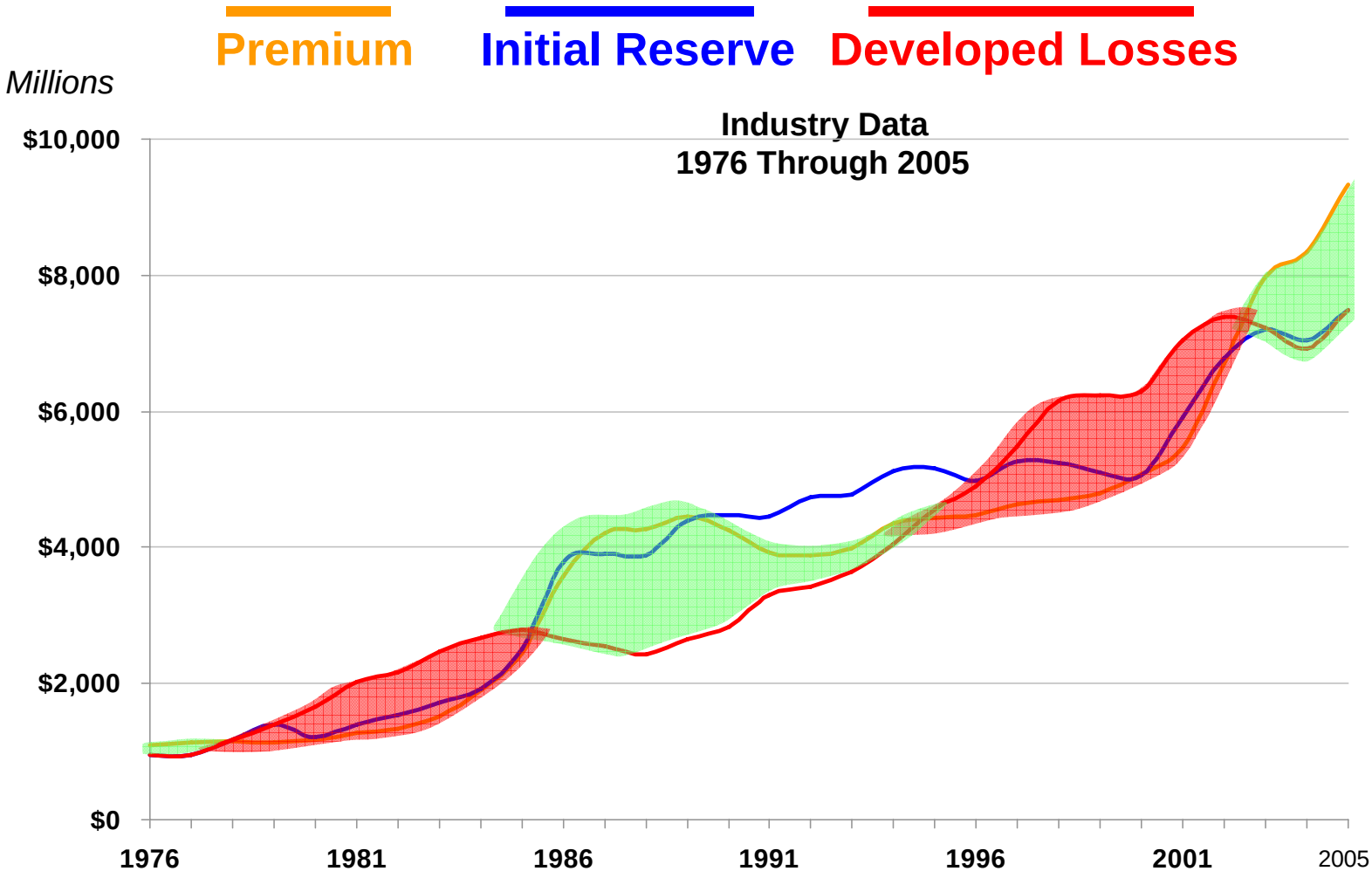
Setting the Stage: How Are We Doing?



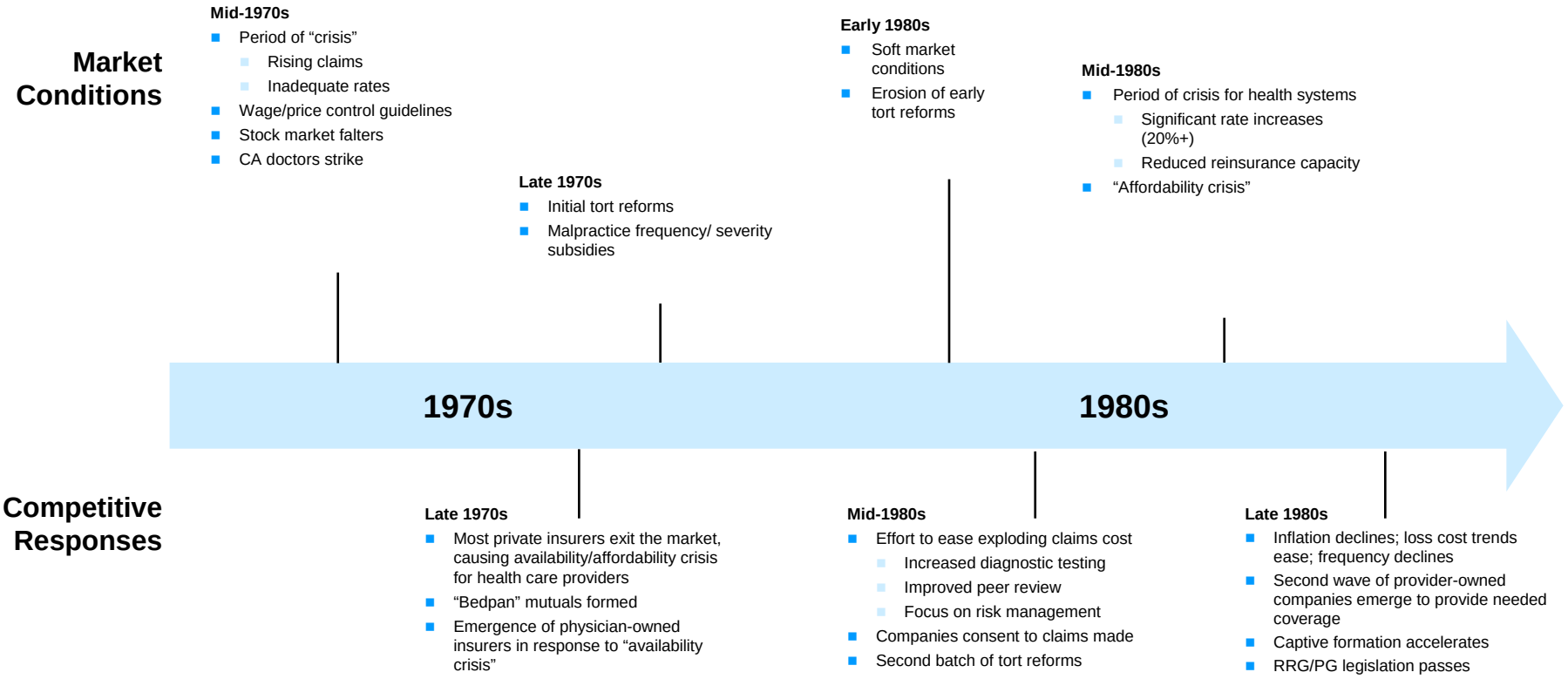
Source: A. M. Best Aggregates and Averages 1976 – 2005
Medical Malpractice Industry, Net Basis Occurrence and Claims-Made Combined

Setting the Stage: How Are We Doing?

- “Actuaries are great at looking backwards but not so good at looking ahead”
- Medical malpractice is subject to market cycles
  - Both pricing and costs
  - Accentuated by it’s long tailed nature
- By the time we recognize the turn in the cost cycle it has often already turned again

The Med Mal Insurance Market Has Undergone Significant Change Over the Past Three Decades

Evolution of the Medical Malpractice Insurance Market



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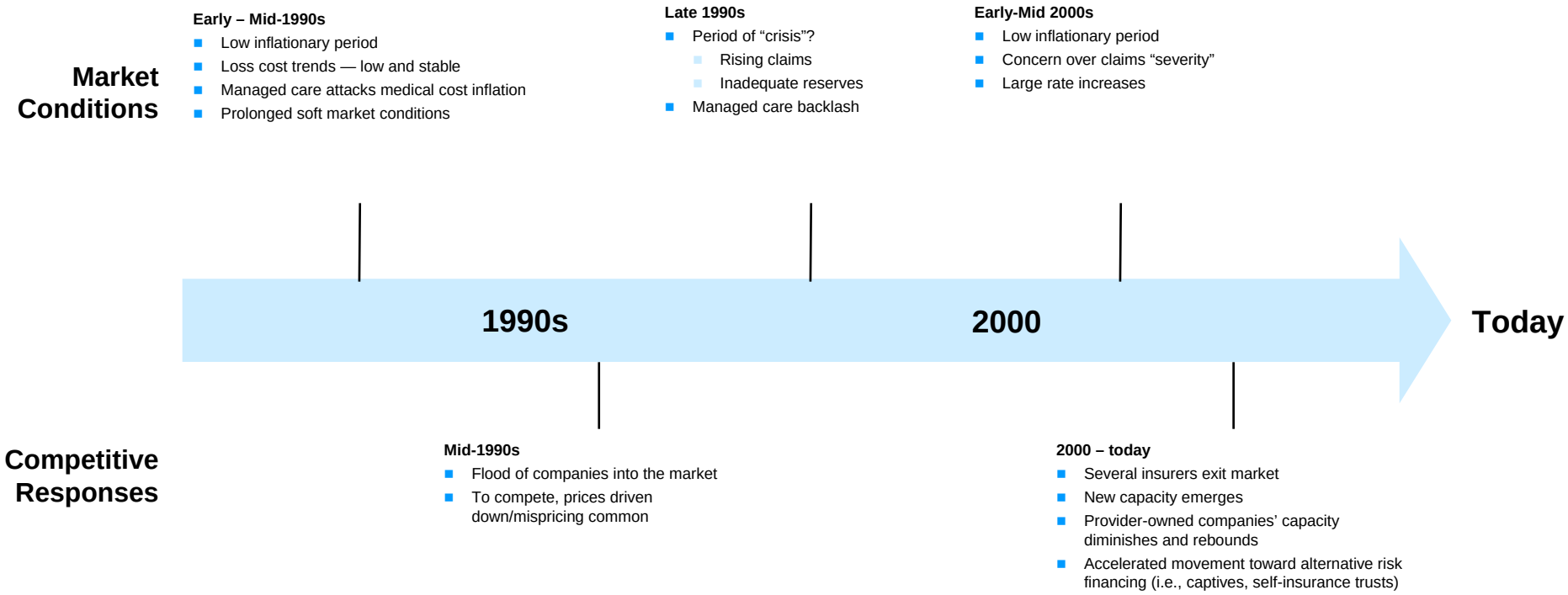


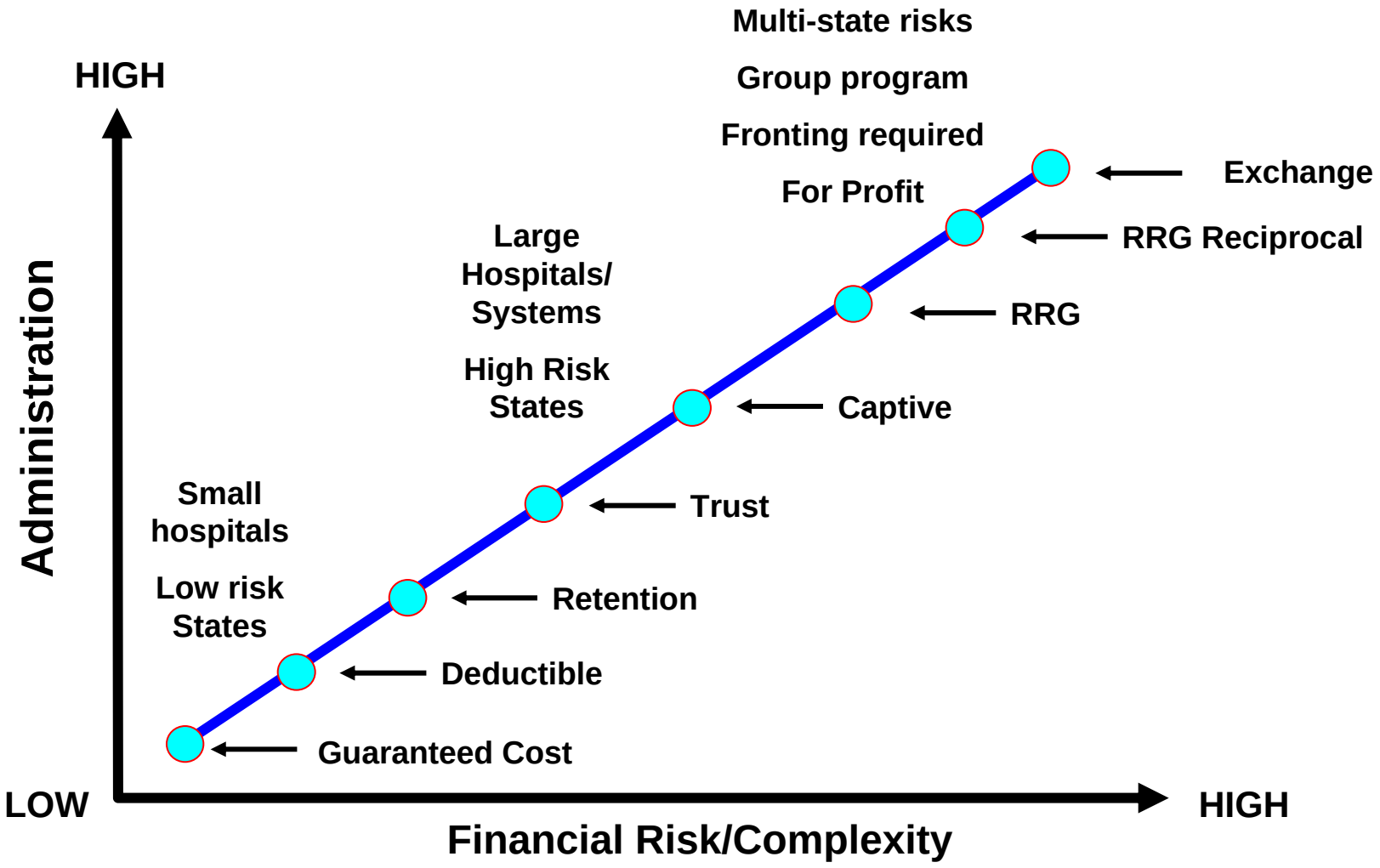
Background

- My view is predominantly from the perspective of the self-insured healthcare client
- My comments are going to overlap between pricing/reserving issues
  - In part because for self-insured's this work is done at the same time
  - Also because in medical malpractice you need good estimates of initial expected losses to guide you through early evaluations for a policy year

Background: What Does a Typical Hospital Med Mal Insurance Program Look Like?

- Generally hospital retains primary layer
  - Small community hospitals may still purchase first dollar commercial coverage
  - Hospital retention varies by jurisdiction and client
    - Can be as little as a large deductible ($250K) or as large as $30M per claim
- Purchases excess coverage above primary retention
  - Again varies by jurisdiction and client
    - Ranges from bare to upwards of $200M
- Programs are predominantly on a claims made basis
- Very limited aggregate protection is offered yet
- Size of insurance programs vary but can be upwards of $200M a year for large clients

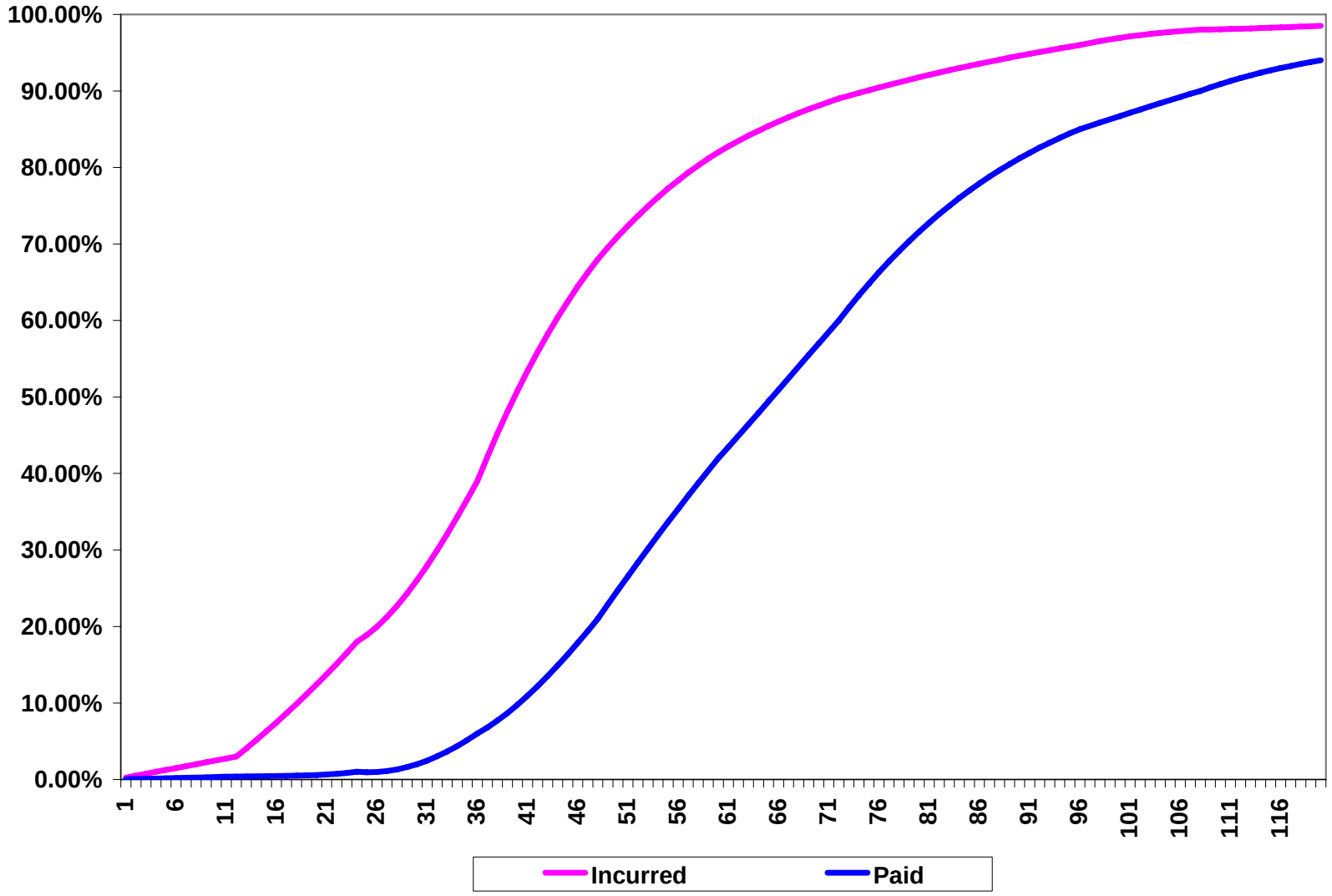
Alternative Risk Finance
Risk Financing Continuum



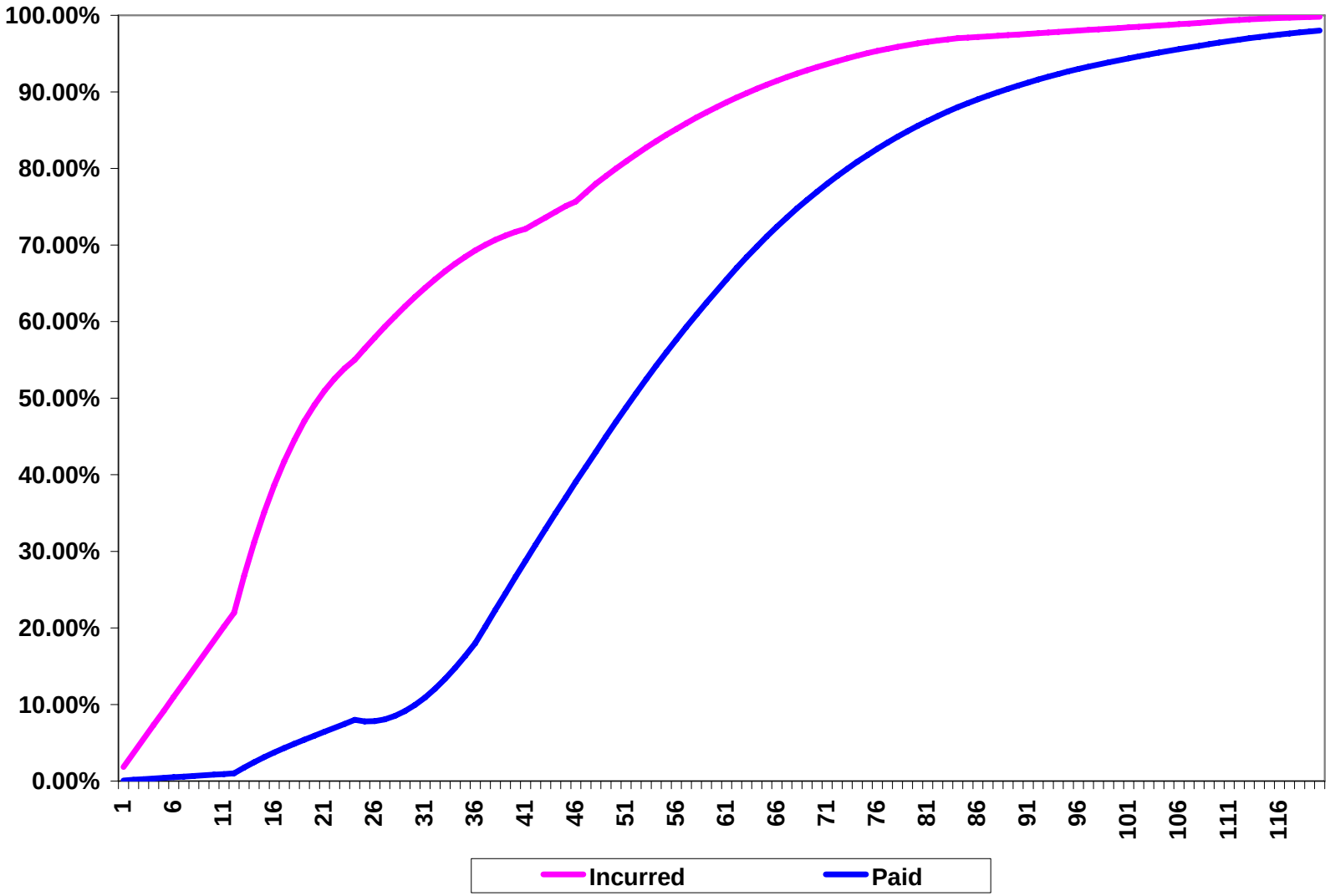
Medical Malpractice is a Decidedly Long Tailed Line of Business

- While it varies significantly by jurisdiction and client, on average it takes 5+ years for an accident year to pay out and 3.5+ years for a report year to pay out
  - Unfortunately it's not uncommon to have large cases pay out much later than the average
  - Unlike other lines, such as workers compensation, much of the payments are back loaded (i.e. at settlement)

Accident Year Paid & Incurred Development Patterns



Report Year Paid & Incurred Development Patterns



What Makes Med Mal Such a Long Tailed Line?

- Often times there is a significant delay between when a medical incident occurs and when the claims staff become aware of it
  - Influenced significantly by the hospital's policies on reporting medical incidents
  - In some cases (often bad cases) the damage to the plaintiff is not apparent for many years
    - Statute of limitations does not run until claimant can be "reasonably" expected to be aware of it
    - Failure to diagnose
    - Bad baby claims (age of majority)
- Often times there is an additional delay between when the claims staff becomes aware of the incident and when they actually begin to put values on it
  - Asserted vs. unasserted claims
  - Time it takes claimant to find the "right" attorney

What Makes Med Mal Such a Long Tailed Line? (cont'd)

- Cases are diverse and many cases are very complex in nature
- Takes significant time to gather the facts of what occurred
  - Peer review, deposition of nurses/physicians, expert review (liability, standard of care)
  - Gathering of information can be significantly more difficult for claims that are late in being reported
  - To the extent that outside parties are potentially involved in the claim they can be uncooperative since they are concerned about their own liability
- Many court systems are notoriously slow moving
  - While very few cases actually go to verdict, settlement often occurs just prior
- Sometime you don't know what you will pay until you know what the other parties in the claim will pay

Review of the Basic Methods

- Problems with incurred and paid development methods are fairly obvious
  - Highly leveraged
    - AY Incurred at 12, 24, etc. are 33.333, 5.556, etc.
    - AY Paid at 12, 24, etc. are 25,806.452, 100.000, etc.
  - As a result will swing widely when a large claims is paid/reserved which is a common occurrence in med mal
  - Message to client: don't reserve or pay claims any earlier than you normally would
  - Not a bad method for a fast moving jurisdiction, client with low retention
- Paid and incurred BF methods are subject to some of the same problems as development methods just not to the same extent
  - Still need to know what the right underlying development pattern is
  - Also need to have an accurate assessment of initial expected losses (more to come on that..)

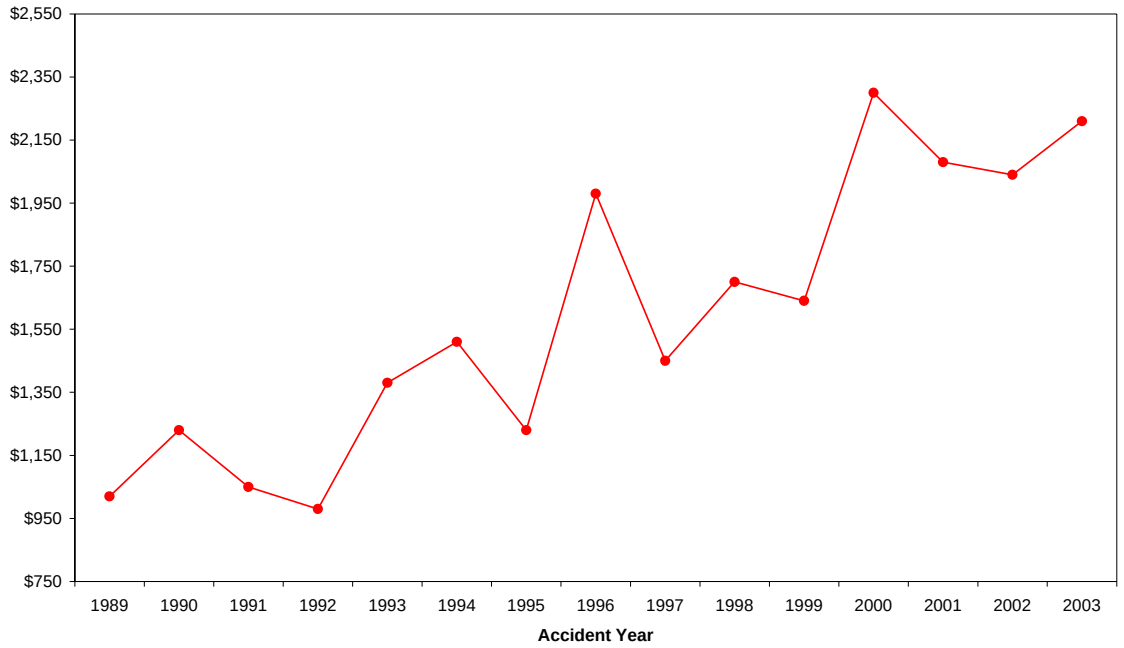
Review of the Basic Methods (Cont'd)

<$15K		$15K - $50K		$50K - $250K		$250K - $1M		$1M - $3M		>$3M	
Count	$'s	Count	$'s	Count	$'s	Count	$'s	Count	$'s	Count	$'s
67.8%	3.2%	14.7%	6.4%	12.6%	21.9%	3.6%	26.8%	1.1%	27.3%	0.2%	14.4%

- Frequency and severity methods don't work as well (or sometimes at all) for medical malpractice as they do for other lines of business
  - Not all claims are created equally; diverse in nature and amount
  - Many programs combine GL coverage with PL coverage
  - What do you do with changes in incident reporting?
  - Frequency and severity are inseparable and are easy to misinterpret
  - Focus on loss costs per exposure instead
- Moral of the story:
  - There's no substitute for understanding the business and your client/insured
  - More methods are better than less

Complications in Pricing/Deriving Initial Expected: Trend Rates

- Med mal is inherently volatile and for the individual client/insured costs never move in a consistent, predictable fashion
- Trend rates are difficult to predict for the industry let alone the individual client/insured
  - Yet they are very much influenced by what the individual client/insured is doing to control (or not) costs



Complications in Pricing/Deriving Initial Expected: Trend Rates (cont'd)

- Factors affecting trend rates are both internal and external
  - External:
    - Tort Reform
    - State of economy
    - More conservative courts/juries
    - Increased public awareness
  - Internal:
    - Senior management's attention
    - Quality/patient safety initiatives
      - Reverse engineering incidents/near misses
      - Improved electronic data/recordkeeping/documentation
    - Apologies/communication/mediation
    - Transparency/improved incident reporting
    - Claims initiatives

Complications in Pricing/Deriving Initial Expected: Increased Limits Factors

- Approach is generally to look at client/insured specific data as some basic limits (i.e. $1 million) and then to use ILF's to adjust to the retained limit
- Depending on clients retention, jurisdiction, etc. this can leave a significant portion of the estimate reliant on accurate ILF's
- Blending of industry vs. client/insured data
- Costs vary significantly by jurisdiction
- Do you really have all the client/insured's large losses?
- Dependent on trend rate assumptions
- Impacted by internal/external influences previously cited
- Impact of rolling physicians into the program

Complications in Pricing/Deriving Initial Expected: Development Patterns

- In addition to normal paid and incurred development patterns, reporting lag patterns are also needs to derive claims made and tail factors
- Changes in development patterns
  - Tort reform
  - Incident reporting
  - Apologies
  - Mediation
  - Not all dates are as they appear
- How do you assess the impact of changes?
  - Berquist-Sherman methods
  - Diversity of claims, long tailed nature make it difficult to interpret changes with certainty

Complications in Pricing/Deriving Initial Expected: Changes in Underlying Exposures

- Importance of accurate exposure differentials
  - Beds, visits, etc.
  - Physicians by specialty, conversion to beds
  - Territory differentials
  - Impact of exit of St. Paul
- Hospitals frequently add new programs, employ physicians, etc.
- Impact of VAP insurance programs
  - Defense costs
  - Indemnity amounts
  - Increased limit factors