

Topics

Healthcare - Now and the Future











Who, What, Where, When, Why & How

Who













Who, What, Where, When, Why & How

What

Health risk management services





Where

5Ws & 1H

Who, What, Where, When, Why & How







When

5Ws & 1H

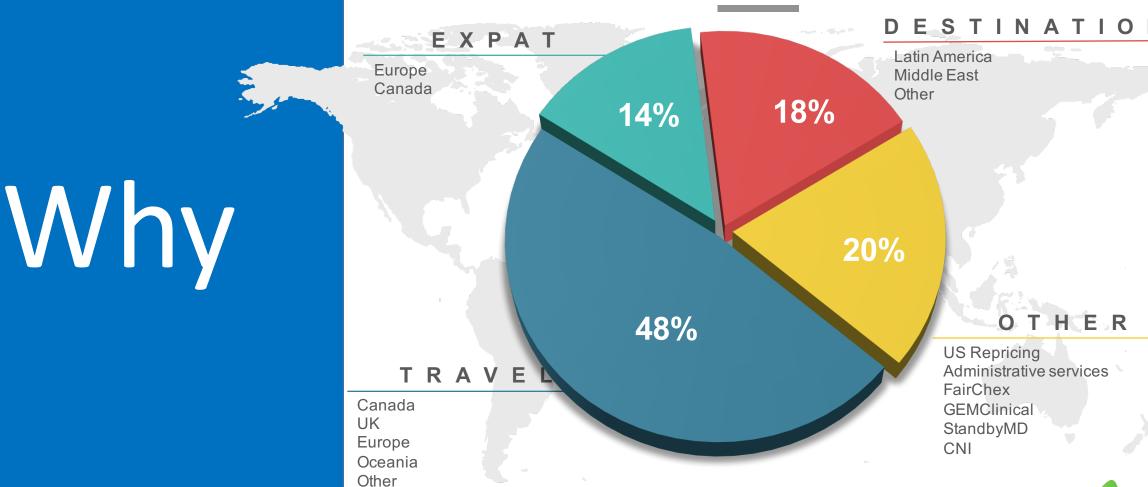
Who, What, Where, When, Why & How







Who, What, Where, When, Why & How

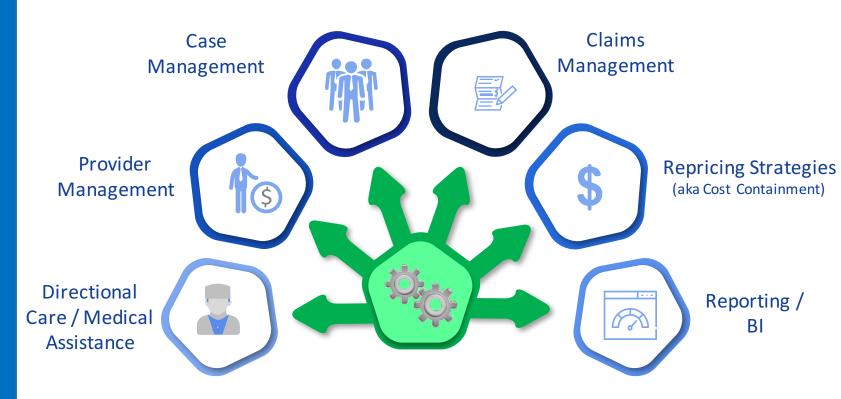






Who, What, Where, When, Why & How

How







Our Reality – the USA





U.S. healthcare IS very different

It's unique in the world



Primarily private healthcare system

Same bill produced regardless of payer

Can be very expensive

'Almost' every bill is discounted

Costs Unregulated

No universal coverage

Vast number of payers: Medicare / Medicaid (pays the lowest dollar amounts), HMOs, PPOs, indemnity insurance, etc.

Size of US Healthcare will be \$3.3T USD in 2017



Primarily public healthcare systems (often supplemented with a second 'private' tier)

Higher/different pricing bill for international patients

Not always 'very' expensive BUT costs are increasing quickly

Discounts possible but not common

A times strongly regulated

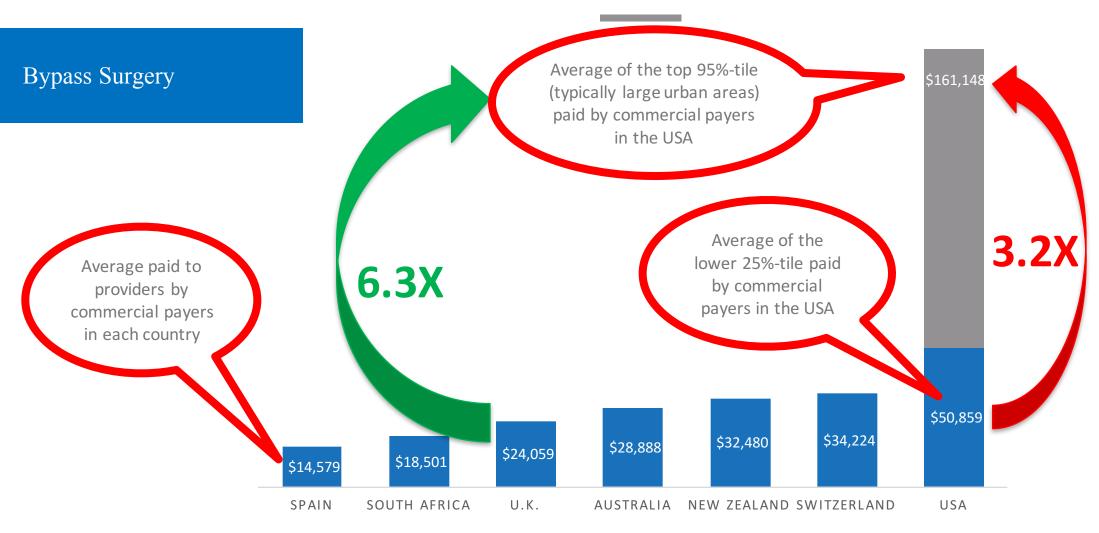
Universal coverage

Often single or very limited multi-payer systems

Small compared to the USA

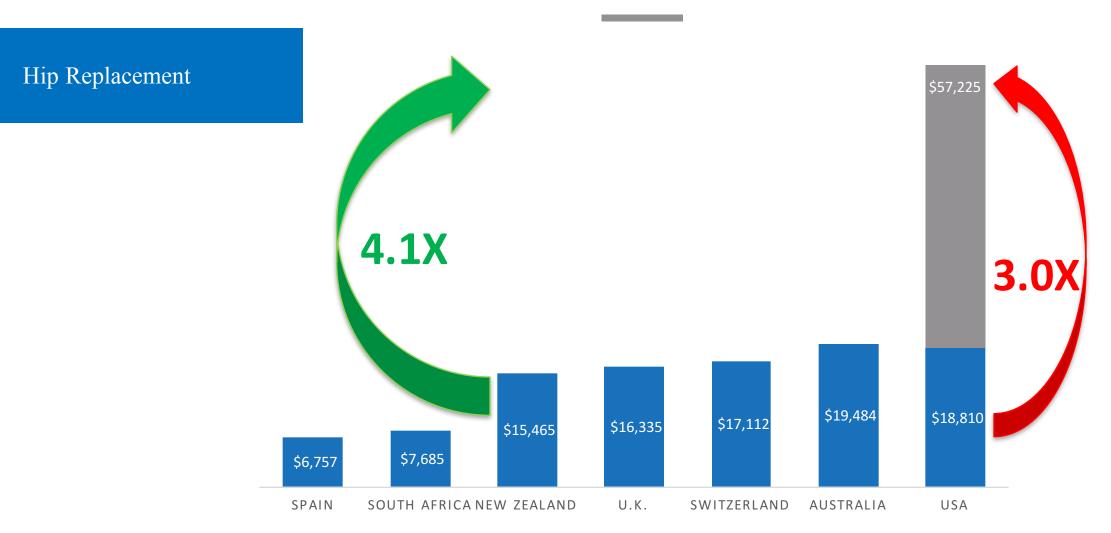






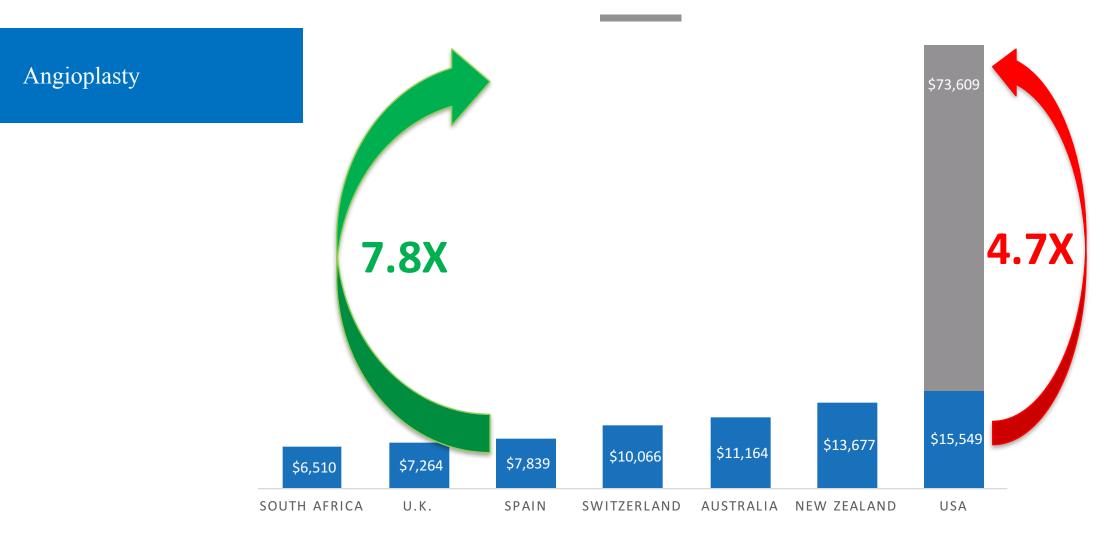
















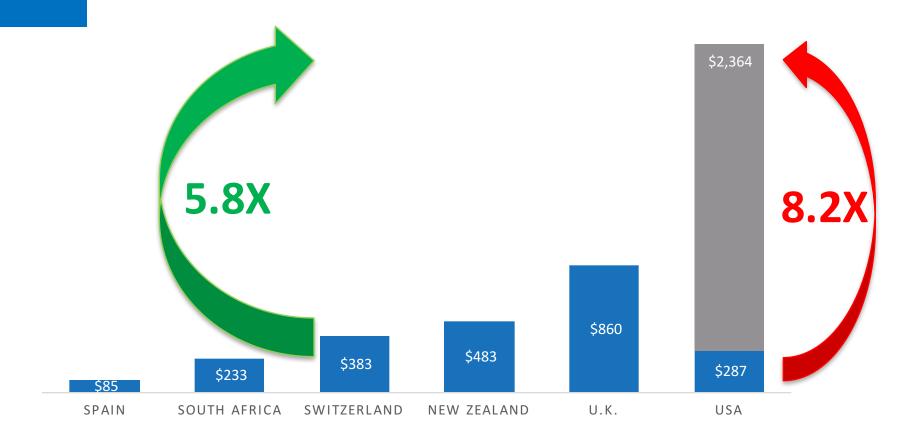






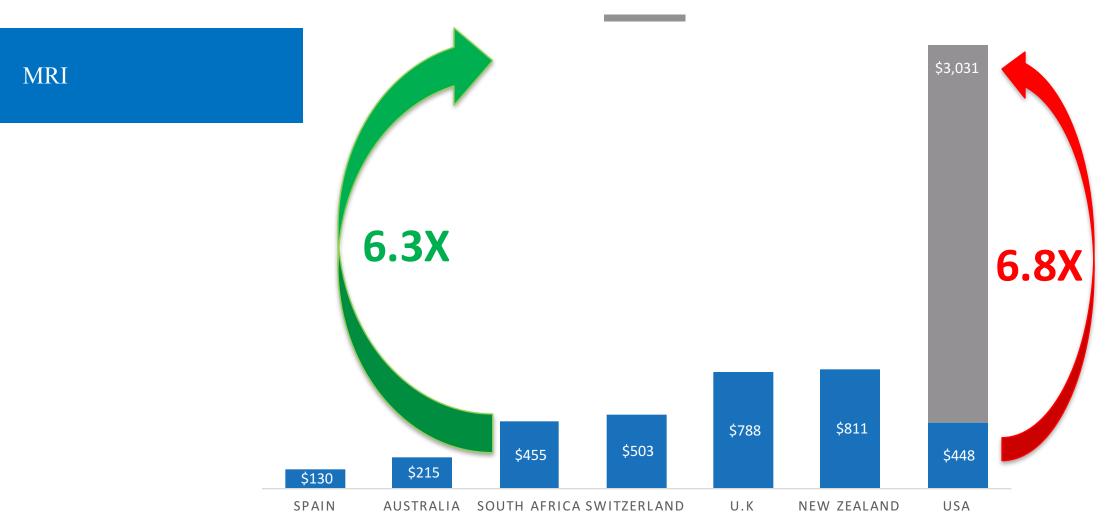
U.S. Healthcare is Simply More Expensive

CT Scan Abdomen









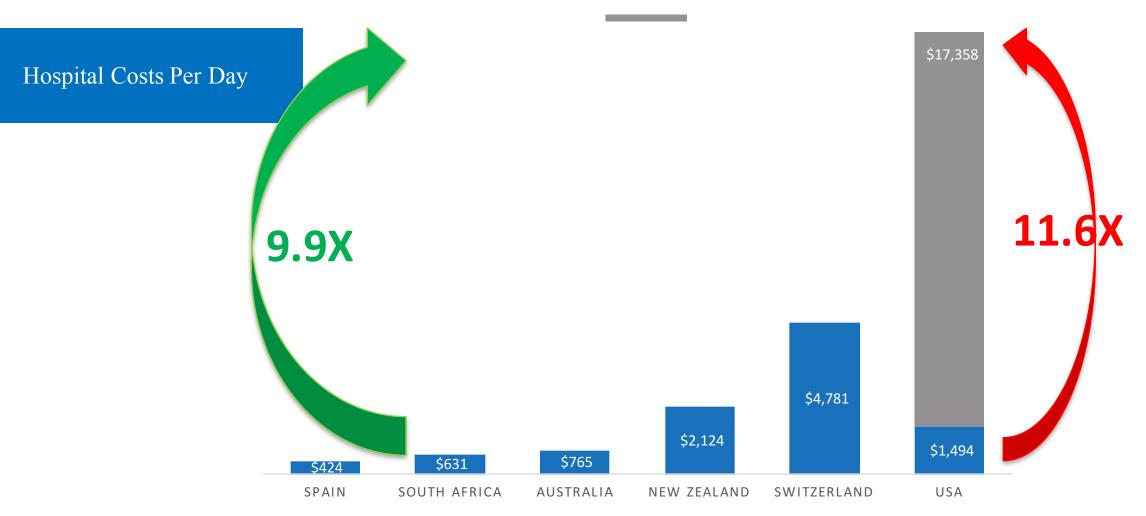










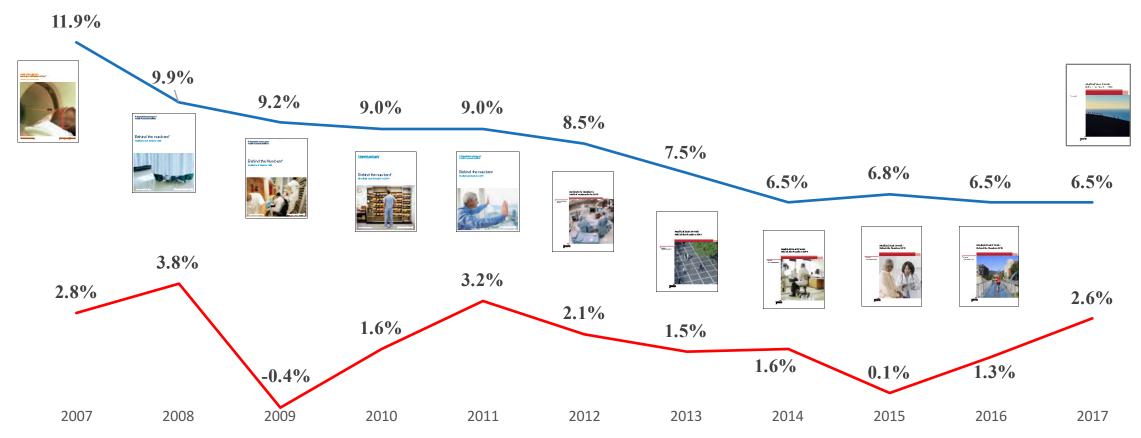






USA Healthcare Inflation Rates

A decline followed by stability, but still well above domestic inflation rates

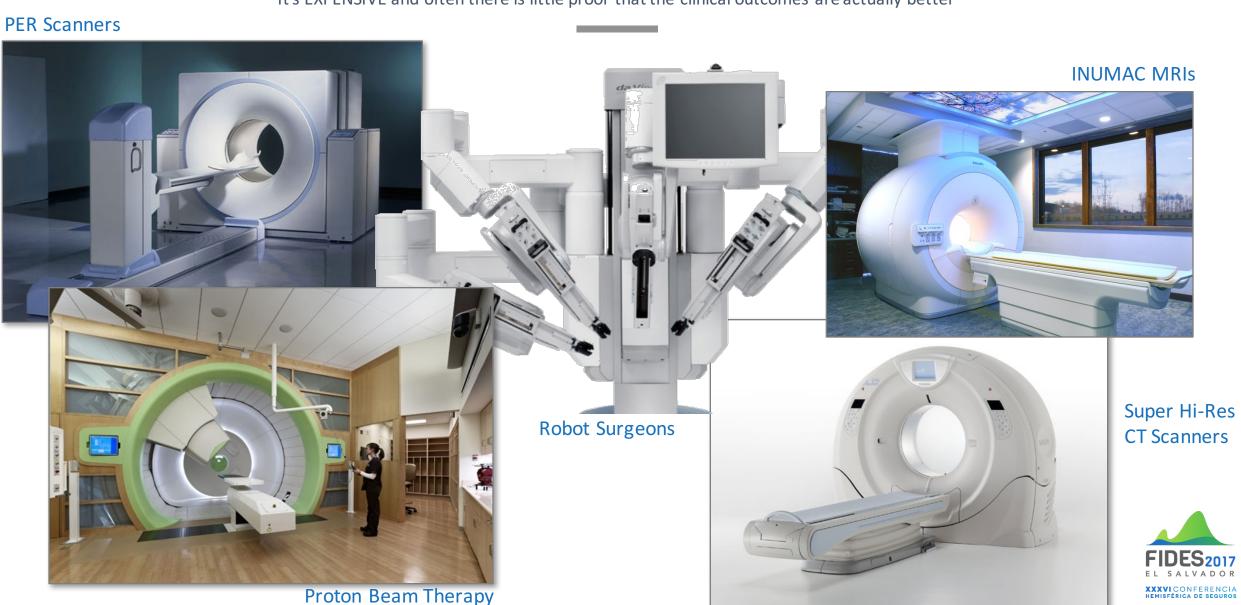






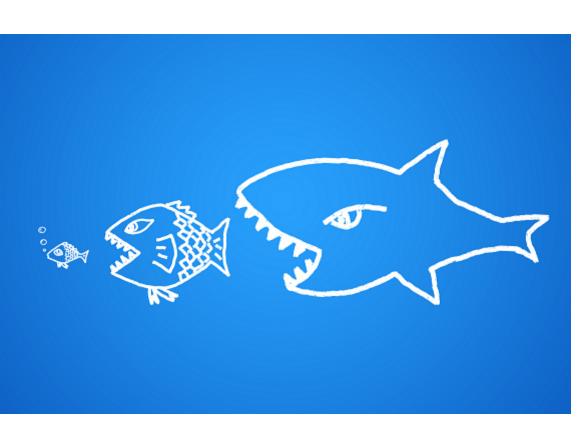
The Use of Technology in Medicine is Increasing

It's EXPENSIVE and often there is little proof that the clinical outcomes are actually better



Industry Consolidation Drives Higher Prices

In 2017 we've had 705 acquisitions worth \$75.9B USD in the US healthcare sector!!!!















<u>Zefo</u>n





FREEDOM































- & Welfare Benefit Systems

Pioneer Health Care

Sanus HEALTH CORPORATION



SALTER LABS



HCA

ASP

Hospital Corporation of America"























Pharmaceutical Prices in the USA are Increasing

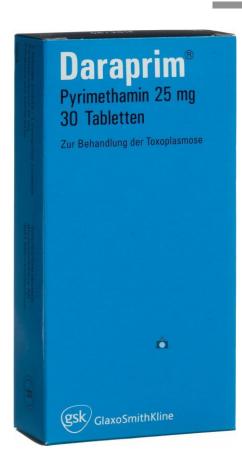
Pharma costs in the USA are the highest in the world



Valeant

• Isuprel: +718%

• Nitropress: +310%



Turing Pharmaceuticals

• Daraprim: +5455%



Mylan N.V.

• EpiPen: +548%



Gilead

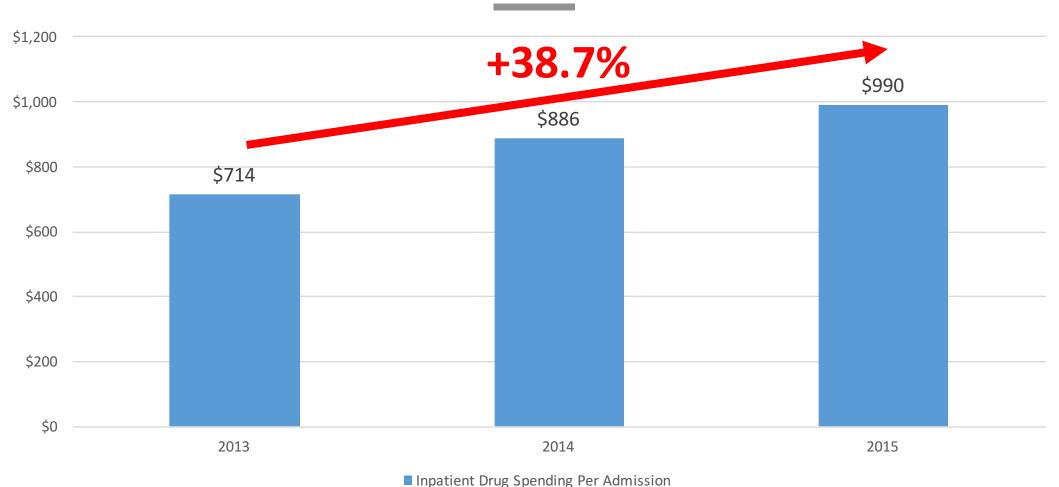
• Sovaldi: \$84,000 per cycle

• Harvoni: \$96,000 percycle



Inpatient Pharmaceutical Costs in the USA are Increasing

And billing errors are rampant





Source: 2015 NORC analysis of AHA-FAH Drug Survey and 2012-2014 AHA Annual Survey



Obamacare vs Trumpcare

No one knows!!!!!



Obamacare Impact

- More Americans now have healthcare coverage
- Children are covered up until 26 years old
- No more denials based on a pre-existing condition
- Lifetime and annual limits eliminated
- Gender equality
- All policies must offer "minimum essential coverage"
- More options available through the exchanges
- Premium increases are now regulated
- Medicaid has been expanded
- Medicare has been improved





Obamacare vs Trumpcare

Right now its VERY complicated!!!!!











Our Future – the Rest of the World





Country Rankings

U.S. Healthcare is Simply More Expensive...but it's not necessarily better

COUNTRY RANKINGS Top 2* Middle Bottom 2*		*		_			+	+	+		
	AUS	CAN	FRA	GER	NETH	NZ	NOR	SWE	SWIZ	UK	US
OVERALL RANKING (2013)	4	10	9	5	5	7	7	3	2	1	11
Quality Care	2	9	8	7	5	4	11	10	3	1	5
Effective Care	4	7	9	6	5	2	11	10	8	1	3
Safe Care	3	10	2	6	7	9	11	5	4	1	7
Coordinated Care	4	8	9	10	5	2	7	11	3	1	6
Patient-Centered Care	5	8	10	7	3	6	11	9	2	1	4
Access	8	9	11	2	4	7	6	4	2	1	9
Cost-Related Problem	9	5	10	4	8	6	3	1	7	1	11
Timeliness of Care	6	11	10	4	2	7	8	9	1	3	5
Efficiency	4	10	8	9	7	3	4	2	6	1	11
Equity	5	9	7	4	8	10	6	1	2	2	11
Healthy Lives	4	8	1	7	5	9	6	2	3	10	11
Health Expenditures/Capita, 2011**	\$3,800	\$4,522	\$4,118	\$4,495	\$5,099	\$3,182	\$5,669	\$3,925	\$5,643	\$3,405	\$8,508





Global Healthcare Inflation Trends

The world is catching up...but they're starting from a lower base

	2015	2016	2017
Global	7.5%	7.3%	7.8%
Latin America*	12.5%	12.4%	11.5%
Asia Pacific	7.5%	7.3%	8.6%
Europe	5.0%	4.3%	4.5%
Middle East / Africa	9.0%	9.0%	9.8%
Canada	8.2%	8.4%	9.4%
USA	8.8%	7.8%	7.5%

^{*} Does not include the Venezuela

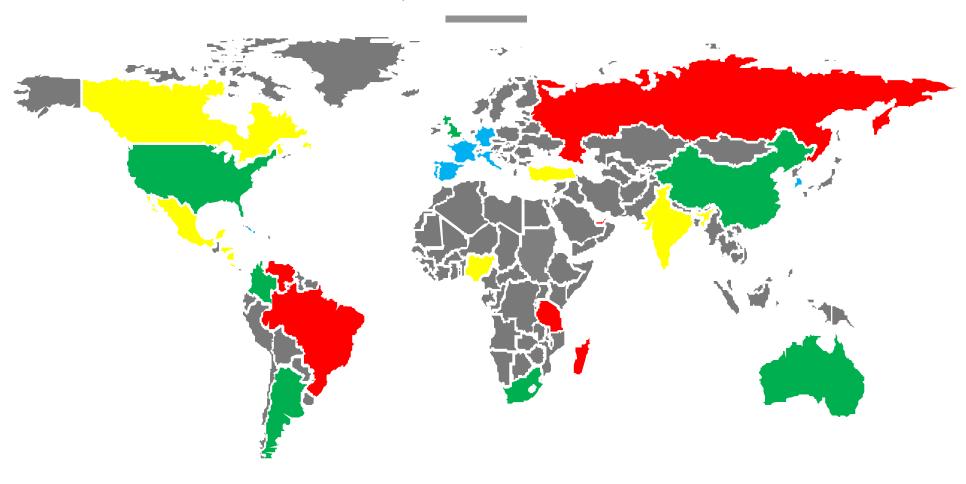
Source: Willis Towers Watson – 2017 Global Medical Trends Survey





Global Healthcare Inflation Trends

Global heat map - Inflation rates around the world









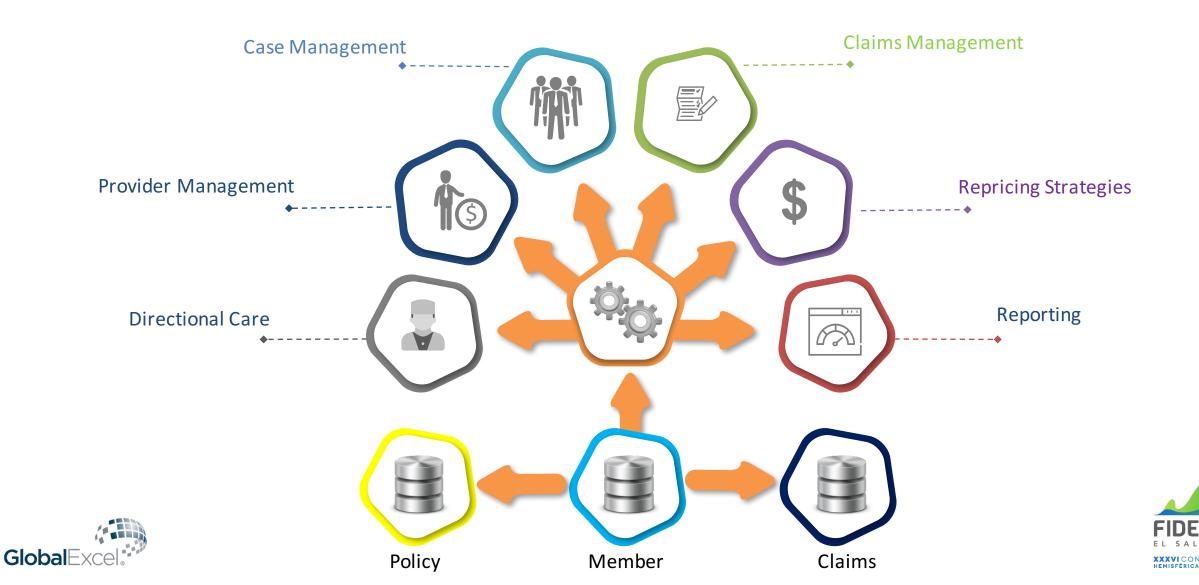


Source: Willis Towers Watson – 2016 Global Medical Trends Survey





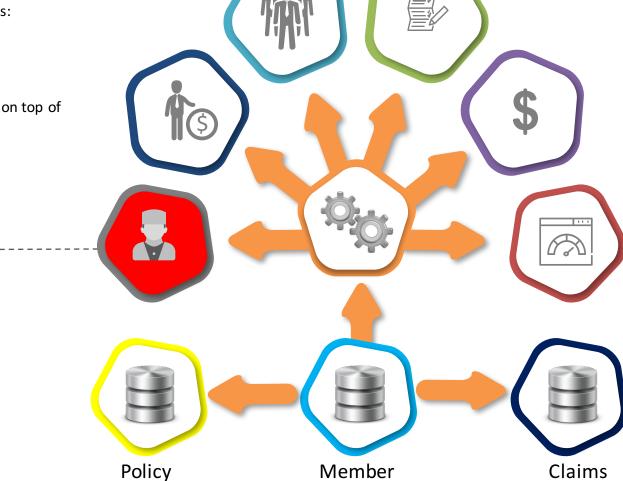




Directional Care

- Our mission: Providing access to the Right care, Right place, Right time, Right Cost on a Worldwide Basis
- StandbyMD 4 stage triage process:
 - Telemedicine
 - Visiting Doctors
 - Clinics
 - ER
- Driven by GEMMobile and layered on top of out FairChex technology









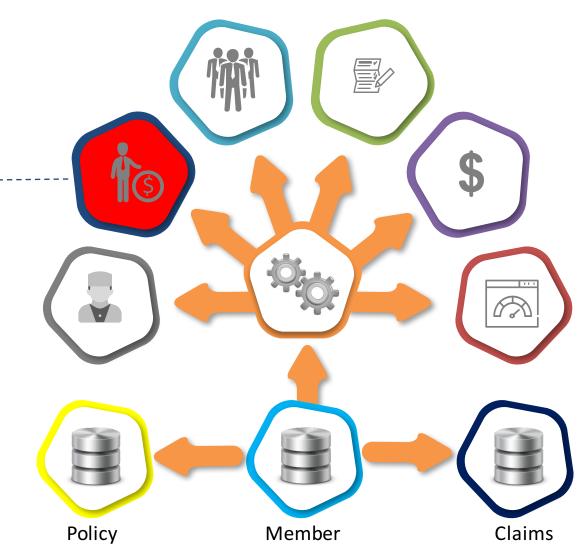
Provider Management

- Mapping provider profiles based on:
 - Location
 - Services
 - Quality
 - Cost
 - Cost to Charge Ratios
 - Invoicing Risk
 - Medicare benchmarking
 - Discounting methodology
 - Payment structures
 - Historical claims data
 - Etc.
- Generates a dynamic ranking profile based on a number of different factors
- · Ranking profiles are used for directing patients and for dynamically changing the insurance card to maximize savings





GlobalExce



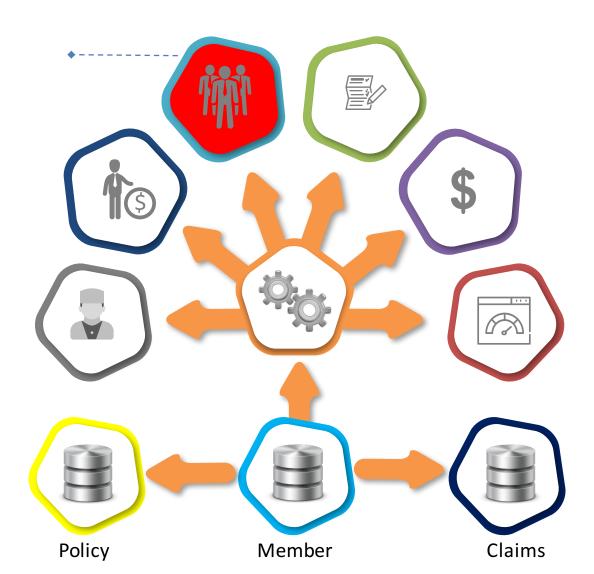


Case Management

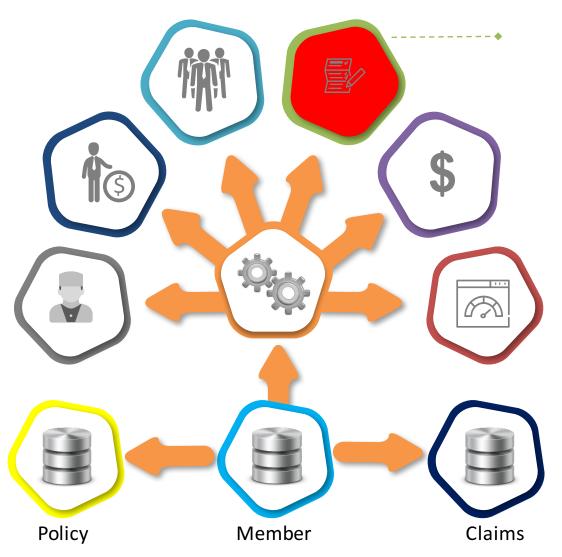
- Risk Assessment Technology (RAT) used to assess the potential 'risk' of a medical incident
- Based on a number of different factors:
 - Complaint
 - Patient age
 - Sex
 - Location
 - Medical Declaration
 - Policy wording
 - Time of day
 - Etc.
- Risk profile used to manage the case
 - Medical case management
 - GEMClinical
 - Treatment path
 - Rehab/Repat strategy

		Potential Severity Rating					
		Minor	Moderate	Significant	Catastrophic		
Likelihood severity occurs	Very Likely	Moderate	High	Extreme	Extreme		
	Likely	Low	Moderate	High	Extreme		
	Unlikely	Very Low	Low	Moderate	High		
	Rare	Very Low	Very Low	Low	Moderate		









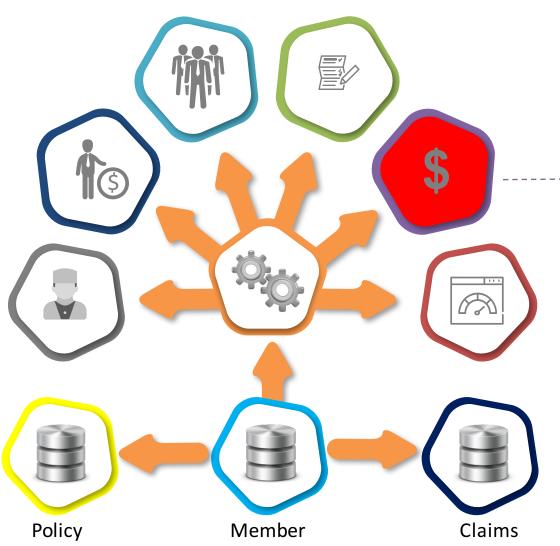
Claims Management

- Auto adjudication based on claim logic and claim risk assessment
- Looks at a number of factors including:
 - Upcoding
 - Medical necessity/appropriatness
 - Unbundling/Rebundling
 - Mutually exclusive services
 - Validation of procedure modifiers
 - Multiple procedure reductions
 - Validity of surgical assistance
 - Maximum frequency-per-day
- Use of twenty years and +\$7B of US claims data to 'learn' (IBM Watson technology)
- Accesses Policy, Member and Claims data
- Accesses external databases for claim information, do not pay lists, fraudulent provider lists, etc.
- In the future we'll use 'voice analysis' profiles to provider an assessment if the insured is providing truthful responses









Repricing Strategies

- X-Routing
- Assigns a risk profile to each bill which is based on a number of different factors including:
 - Comparison to different benchmarks (i.e. Medicare in the USA)
 - Drug, lab or implant components
 - Hospital acquired conditions
 - Legal issues
 - High Cost Acute Conditions
 - Experimental conditions
 - Coding errors
 - Etc.
- Based on the risk profile AND the client risk profile the bill is routed to:
 - Negotiation
 - PPOs
 - HMOs
 - Contracted facility
 - Complex Claims Unit



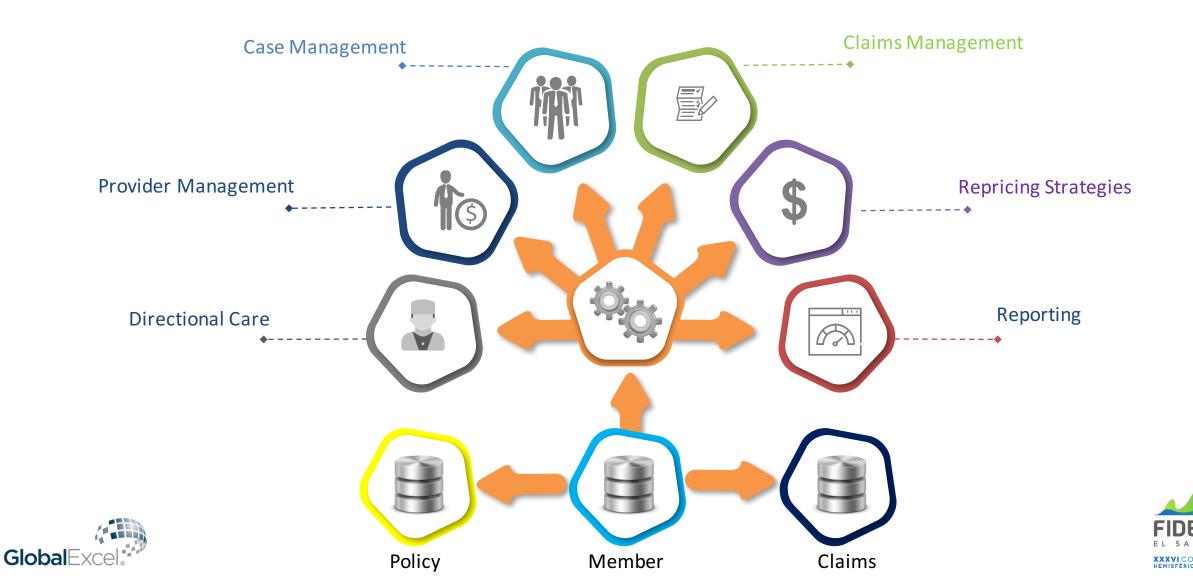








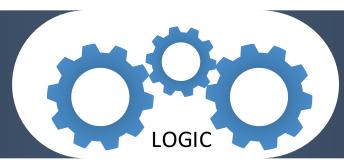
Our Solution – The Risk Assessment Engine



Risk Assessment Engine



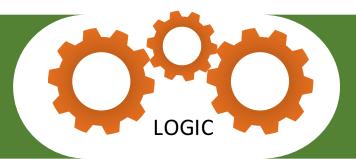
- Policy covers X
- 62 Year old male from CAN
- Fainted
- History of diabetes
- Miami
- 3 am



- Risk score 2.1
- Emergency Room Referral
- Prepayment offered



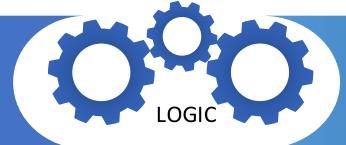
- Diagnosis X
- Avg LOS 8 days
- Reserve is \$90K
- Policy max is \$100K



- Risk score is 2.5
- Assigned to Case Coordinator
- FU required same day
- Get AA Quotes



- Foreign hospital XYZ
- No contract
- Upfront history of negotiation



- Call for upfront
- DRG deal is reached
- Rush payment
- Risk score is 1.4





Technology **IS** the future but...
there will always have to be a human element!!



