

**Supplementary file online: Data extraction sheet**

<b>Sl. No</b>	<b>Author/s Year of Publication</b>	<b>Objectives of the study</b>	<b>Research methodology</b>	<b>Key Findings</b>	<b>Inference and Conclusion</b>
<b>Elusiveness of Hospital Pricing</b>					
<b>1.</b>	Brown 2014	To posit that hospital pricing is irrational.	Article	The incentives for hospitals to raise their charge masters are: (i) higher charges create greater leverage for health plan negotiation (ii) some patients do pay full list prices. (iii) inflated charges were used to boost calculations of charity care provided. (iv) Increase outlier payments from Medicare.	There has been a lack of dispute on hospital irrational pricing which bear no relation to cost or quality. The costs are highest to those with the least ability to pay.
<b>2.</b>	Tengilimoglu and Dziegielewski 2000	To discuss comparative pricing strategies of public and private hospitals in Turkey	Review paper	Public hospitals use mandate pricing strategies. Private hospitals use competitor focused and market driven pricing strategies. Package pricing of services is recommended for use.	Prices must be updated to reflect changes in the input prices. Growth in productivity and improvements in technology must be considered. Careful assessment of market and operational factors for package pricing.
<b>3.</b>	Harris 1979	To show the role of cross-subsidization in compensating for distortions and inequities in health insurance coverage.	Empirical study based on models	Cross-subsidization is found to have potentially significant welfare gains.	Average-cost pricing may have serious drawbacks.
<b>4.</b>	McKinney, R.M. 1990	To understand the reasons for pricing of tangible products receiving great attention but not pricing of services.	Review based paper	Expected number of patients served, quality and expected number of patients turned away are taken into account.	Increased competition in the hospital industry, difference in case mix, advertising and different profit motives are factors that must be considered for pricing.
<b>5.</b>	Krentz and Jennings 1986	To discuss pricing strategies of hospital based ambulatory care services	Article	The pricing task is a difficult one because available information is generally not refined or detailed enough for decision making.	There is no “right” answer when it comes to pricing schemes.

6.	Leven E.L. 1984	The focus of this article is on the interplay between the marketing and finance departments within a hospital setting in terms of how they can work together to successfully price hospital services.	Review paper	Steps for hospital pricing: Determining the cost of providing a particular service, breaking down costs into fixed and variable components, conduct a demand analysis, conduct a profit analysis, use data on competitive pricing and price sensitivity, do a detailed financial analysis of all the extra or hidden costs of the contract.	Pricing must reflect market place environment, cost, demand and competition mix, trade-offs between costs (fixed and variable), volume and price. Solid working relationship between marketing and finance. Forecasting market volume of services for speciality contract pricing.
<b>Hospital service pricing objectives, strategies, and pricing practices</b>					
7.	Benz 1998	To focus on steps in developing prices.	Article	Hospital pricing objectives, payment structures, expected volume of admissions, intensity and departmental volumes of service, net revenues, expected costs, margins and profit and loss, volumes, net revenues, costs and profitability must be involved in pricing.	Steps help hospital manager develop competitive prices.
8.	Bonnici 1992	To approach pricing problem from the perspective of the pricing objectives, projected demand, forecasting method and the interaction of price with the marketing mix.	Article	Price levels are affected by the objectives, environmental conditions, population characteristics, social environment, Healthcare systems, medical practices, innovative drug therapies Trend extrapolation, mathematical models, Delphi technique and scenario writing can be used to determine price levels. Promotion influences price sensitivity. Segmented pricing and distribution are important dimensions of pricing.	Generalizations do not reflect actual pricing behaviour. In an ever-evolving environment, describing pricing behaviour at micro economic level must be done without incorporating in the process each organizations specific objectives and its perceived and actual environments
9.	Bauerschmidh and Jacobs P. 1985	To identify the factors influencing pricing decisions of non-profit hospital managers.	An empirical study using survey method.	Internal organizational influences- trustee attitudes had the highest impact on pricing. Desire to maximize net revenue influenced pricing objectives.	Trustees emphasized the goal of prices to kept within the reach of patients. Pricing policies must take patient service into account.
10.	Horowitz and Kleiman 1994	To analyse price determination in hospitals in Turkey.	Empirical study	Mandate pricing strategies are used by government hospitals and Competitor focused and market-driven pricing in private hospitals in Turkey	Pricing plans must take into account input prices of labor, equipment, supplies, improvements in medical technology and growth in productivity.
11.	Reinhardt 2006	To describe service pricing to self-paying patients and third party payers in U.S hospitals.	An empirical study using secondary data analysis.	A list of prices called charge master is used to charge patients for services. Hospitals accept different payments from different payers for identical services.	Healthcare pricing is a component of healthcare financing. Administrative expense ranks as major cost component of U.S healthcare.

		To offer an economists perspective on the widespread practice of price discrimination in the hospital industry.			
<b>12.</b>	Tanwar et al. 2019	To analyse the pricing problem faced by a monopolist hospital.	An empirical study using econometric model.	Optimal price would always lie between risk minimising and profit maximising prices.	The pricing model helps in setting of prices for treatments especially under cost uncertainty.
<b>13.</b>	Brown and Atal 2018	To evaluate the robustness of previously published results on reference pricing.	Empirical study	The use or pre-processing technique is a valuable check for robustness of the effect of reference pricing on patient site-of-care choice, total expenditures, and complication rates.	Reference pricing policy is a policy that can be considered for procedures like colonoscopy, arthroscopy, and cataract surgery.
<b>14.</b>	Nassiri et al. 2020	To understand how reference pricing performs relative to more traditional payment systems.	Game theoretical model	Highest price providers reduce their prices under reference pricing.	Reference pricing constitutes a promising payment system for “shoppable” healthcare services.
<b>15.</b>	Sutherland 2015	To calculate the marginal costs of surgeries based on assumptions regarding hospitals availability of labor and equipment.	An empirical study using secondary data from hospitals.	Pricing for inpatient surgeries do not generate positive margins under a range of operating scenarios. Hip and knee surgeries generated surpluses for hospitals even under the costliest labour conditions and are expected to generate additional volume.	Setting prices should reflect knowledge of hospitals underlying cost structures.
<b>16.</b>	Malmlose et al. 2018	To investigate the hospitals’ regulated and unregulated financial results to accentuate important factors in transitioning from fee-for service to global budget setting.	Common size and difference-in-difference analysis.	Regulated profit ratios for hospitals increased and regulated expense-to-gross patient revenue ratios decreased.	Cost-shifting and less profit gain from the program than identified by solely focusing on the regulated margins.
<b>17.</b>	Teymourifar et al. 2021	To propose new pricing policies and contract mechanisms to be applied between government and private hospitals.	Empirical study using models	Linear two-part tariff contracting mechanism is proposed.	Proposed mechanisms can improve the system performance significantly.
<b>18.</b>	Hellsten et al. 2016	To develop pricing models for bundled payments.	Costing approach	Normative pricing models for stroke episodes result in increasingly aggressive redistributions of funding	This study demonstrates the feasibility of novel clinically informed episode pricing approaches that leverage variations to target reductions in potentially avoidable utilization.

19.	Audibert et al. 2007	To show estimation of costs through step down process enables more equitable and efficient pricing policy.	An empirical study.	There are possibilities of cross subsidies within the hospital or within the services which improve recovery of current costs.	The approach leads to several proposals of pricing care taking into account the constraints, the level of the hospital, its specific conditions and equity.
20.	Thekkekara and Thiagarajan 2019	To understand variability in cost and prices of services.	An empirical study using bottom up micro costing method.	The cost of providing the services are lower in the higher per capita income districts but the price for services is higher.	Prices do not relate to cost. Large competition and better technologies do not reduce costs. There is a need for price regulation. Availability and ease of access to services in public facilities could contribute to controlling prices.
21.	Kleimenhagen et al. 1994	To examine the price strategies that hospitals follow.	An empirical study using the survey method.	Not much attention has been given to the pricing variable.	The pricing strategies paid by hospitals were cost plus pricing/ Return on Investment/competition or stabilization strategies. No single pricing strategy leads to superior performance.
22.	David et al. 2014	To exploit the entry of Cardiac specialty hospitals and their ability to cross-subsidize unprofitable services.	Empirical study	Hospitals most exposed to entry reduced their provision of unprofitable services.	Hospitals most exposed to entry expanded their provision for profitable services.
23.	Dittman and Morrey 1981	To provide a model that enables profit maximisation with revenue constraints.	An empirical study using an econometric model.	The model enables price setting of ancillary services, by type of service, in order to maximise the hospitals net profits.	Reasonable price adjustments by hospitals to take into account projected changes in the mix of clientele can increase their profit margins substantially.
24.	Dranove 1988	To estimate an objective model of cost-shifting in hospitals.	An empirical study using econometric model	Model showed consistency with cost shifting behaviour. Profit shock is a key variable in cost shifting	For profit hospitals also cost shift. Hospitals cost shift when government cuts reimbursement.
25.	Frakt 2011	To examine the literature on cost-shifting.	Review article	Large and pervasive phenomenon	Cost-shifting is one of the effects of changes in public payment policy.
26.	Tompkins et al. 2006	To highlight gap between billed charges and underlying costs by tracing the history of setting charges for hospital services.	Qualitative research using interviews	Impact of Medicare and Medicaid, growing cloud of private payers, influence of competition, price variation, self-paying patients, other payers were the causes of the gaps.	Strategies and methods used to determine charge levels have resulted in rapidly growing charges and wide variations among hospitals.
27.	Melnick and Fonkych 2008	To analyse whether hospital prices to the uninsured were systematically different from prices to the insured.	An empirical study using secondary data.	Uninsured patients pay prices similar to insured patients.	Despite media attention, hospital prices to the uninsured have risen over the years.

28.	Woodworth et al. 2017	To determine whether hospitals charge differently based on their insurance status.	Empirical study	Compared with patients with no insurance and public insurance, patients with private insurance received higher hospital bills.	Conditional on patient characteristics, length of stay, and expected intensity of resource utilization, patients with private insurance and patients with Medicare were charged more (before discounting) than their uninsured counterparts within the same hospital.
29.	Freisner and Rosenman 2009	To present a new methodology to measure cream-skimming in hospitals.	Empirical study using economic model	Hospitals do practice cream-skimming	Little evidence to suggest that cream-skimming varies by hospital size, profit status or time.
30.	Newhouse 1984	To present a clarification on remarks on Pauly (1984s) views.	Review article	If firms are able to identify sick individuals, prices will be set tailored to risk	The potential for risk of risk of insuring inpatient services in terms of quantity can shifted from an individual without creating scope for market failure.
31.	Pauly 1984	Questions Newhouse's assumptions on the problem of cream-skimming.	Empirical study	Consistent with Newhouse's assumptions, there does not exist cream-skimming in an unregulated competitive market.	It is essential to distinguish between cream skimming and adverse selection.
32.	Levaggi and Montefiori 2011	To study the scope of cream-skimming behaviour in a mixed market for hospital care.	Empirical study using models	Cream-skimming is made possible by the presence of two important elements.	Public hospitals prefer to treat high severity patients. Regulators are unable to enforce hard budget constraint rules. As per traditional literature cream-skimming alone is considered the cause of market failure. In this study, cream-skimming arises out of regulatory failure.
33.	Matsaganis and Glennerster 1994	To explore the potential for protection against cream-skimming in fund holding practice.	Empirical study using models	Cream-skimming is not yet an issue in general practice fund-holding.	The use of adjusters in formulas for fund holding should be given an urgent consideration and there are benefits in reducing opportunities for cream-skimming.
34.	Ellis 1998	To understand the influence of the payment system jointly influencing the intensity of services and the extent of who is treated.	Empirical study using model	Re-imburement incentives influence intensity of services and who is treated when patients differ in illness-severity.	Cost-based re-imburement results in over provision of services (creaming) to all types of patients.
35.	Barros 2003	To present a transfer system that attains both provider efficiency and no risk selection.	Empirical study using models	The transfer system extends a typical linear system	The extension of linear payment systems helps address issues such as payment systems, risk selection, and incentives for efficiency.
36.	Berta et al. 2010	To analyse the effects of distortions induced by prospective payment systems	Estimation of a production function	Cream-skimming has a negative effect on a hospitals' technical efficiency.	Private hospitals are more engaged in cream-skimming than public and not for profit ones.
37.	Cheng et al. 2015	To investigate the phenomenon of cream-skimming in a mixed public-private hospital setting	Empirical study using econometric models	Patients with higher disease severity are more likely to be transferred from private to public hospitals	Evidence of cream-skimming practice

38.	Yang et al. 2020	To examine cream-skimming behaviour by studying hospital transfers in a mixed public-private hospital system.	Empirical study using econometric models	With finite capacity, public hospitals are less likely to transfer patients than profit-motivated private hospitals at the same level of capacity.	The desire to optimize the use of limited capacity drives cream-skimming.
39.	Chen and Lang 2021	To explore the connection with regional inequity with different levels of healthcare facilities.	Content analysis and regression analysis	Senior cadres enjoy high priority in hospital services.	Demand side cream-skimming effect observed in China's healthcare service sector.
40.	Kjostolsen et al. 2021	To analyse physician views on the risk of cream skimming under a system with activity based financing (ABF).	Survey	Reforms led to further cream-skimming	Physicians in leading positions are less likely to view cream-skimming as a problem.
<b>Factors influencing pricing of hospital services</b>					
41.	Duggan 2000	To examine the relationship between prices and local market concentration for California hospitals	Empirical study using models	Under payer-driven competition, the price/concentration relationship for hospitals may be expected to confirm to the I/O paradigm.	The shift towards payer-driven competition has mitigated the effects of competition on hospital profit margins.
42.	Hsu 2011	To investigate the relationship between unit allocated capacity costs and service prices in a firm with long term capacity commitments as well as the level of expected capacity utilization and demand variability affecting this relationship.	An empirical investigation using model.	Price and unit costs were higher where capacity utilization was higher. Smaller for profit hospitals in competitive markets have lower capacity utilization and higher demand variability. Hospitals with higher utilization and lower demand variability have lower unit costs and charge a lower price.	As capacity utilization increases, hospitals increase the weight of allocated capacity costs in pricing. Demand variability negatively affects the association between unit allocated costs and prices.
43.	Heshmat 1992	To identify the key players in setting prices in non-profit hospitals and the objectives pursued in setting those prices.	An empirical study using survey method.	Trustees are the single most important body in the price setting process and the pricing goals are more related to target revenue than profit maximization.	Administrators have a very strong influence on pricing decisions. While setting prices hospitals are more sensitive to the demand from business firms, patient reactions and other hospital competitors than internal factors.
44.	Weisbrod 1965	To consider relationships between prices, costs, capacity utilization and resource allocation hospitals.	Structure of hospital room prices and utilization instability for a hospital were key factors for secondary data analysis.	Greater hospital costs were associated with unused capacity. Variation in occupancy in metropolitan hospitals at a given time.	Price and use of hospital services should reflect costs and availability of resources particularly hospital rooms and hospital facilities.

45.	Hsia et al. 2014	To determine the institutional and market-level characteristics that influence adjusted charges.	Cross-sectional study	Hospitals in markets with middling competition had lower adjusted charges. Hospitals with high wages and case-mix indices has high adjusted charges.	Institutional and market level factors explained variation in charges to a considerable extent.
46.	Newhouse 2003	To understand the reason for differences in costs for teaching and non-teaching hospitals.	A review paper	Research, Education, Patient care, revenue generation, case-mix differences and greater intensity of care are reasons for costs in teaching hospitals.	Teaching hospitals must be financed through general revenues and not insurance.
47.	White et al. 2014	To examine the reason why some hospitals can negotiate higher prices than their nearby competitors	Quantitative study – descriptive statistics	High price hospitals tend to be larger major teaching hospitals, belong to systems with larger market shares and provide specialized services.	Price variation and high prices reflect an ongoing tug-of-war between increasingly consolidated buyers (health plans) and increasingly consolidated sellers (hospitals and hospital systems).
48.	Burke et al. 2019	To compare total standardized costs at 30 days based on hospital teaching status for common conditions.	Cross-sectional study	Medicare patients that were treated at major teaching hospitals had lower Medicare spending at 30 days and similar costs at 90 days compared with Medicare patients at non-teaching hospitals.	Care at teaching hospitals is relatively more expensive than non-teaching hospitals
49.	Higgins et al. 2016	To examine price differential for individuals with employer sponsored insurance by site of care for seven commonly performed services at the national and regional level.	Quantitative study that used descriptive and inferential statistics.	Across all the seven services, prices were higher in hospital out-patient departments as compared to physician offices.	Price differentials for services existed at national level and are increasing over time.
50.	Babcock 2019	To examine the structure of pricing within healthcare.	Article	The capitalist natural price must first be determined and a solidarist approach should be favoured.	Unique features of healthcare pricing and prioritization indicate that moral principles must guide the economics of health care, not merely supply and demand.
51.	Raulinajtys-Grzybek et al. 2017	To assess the cost-accounting solutions currently used in Polish hospitals.	Survey method	Limited usefulness of the researched costing model in pricing.	The cost accounting model of 1998 is not suitable for the purpose of pricing of health services.
52.	Davis 1971	To examine the ratio of hospital prices to average costs.	An empirical study using econometric model.	Price-average cost ratios are a function of demand and supply conditions especially in a monopolistic view of the market.	Hospital do not attempt to cover costs in their pricing policy. Revenue generation from excess price over cost is not substantiated. High ratios in states with high per capita income.
53.	Karaesman and Nakshin 2007	To identify the challenges in hospital pricing in US hospitals.	Article – Discussion paper	Current pricing and billing extremely complex. Revenue cycle management is an issue in hospitals	Estimating costs and re-imbursements critical for pricing optimisation. Traditional PRO techniques can not be used for hospitals.
54.	Llewellyn et al. 2020	To understand the ramifications of cost-based prices for creating value in hospitals.	Empirical study	Three valuing activities that mobilise cost-based prices are “bubble-charts,” “Upcoding” and “business cases”	Cost-based pricing creates public value by raising activity levels.

55.	Bahuguna et al. 2020	To identify the key drivers of unit cost of inpatient and outpatient services at public health facilities.	An empirical study using econometric model.	Health service utilization had the greatest influence on unit cost, while the number of beds, facility level and the state were good predictors.	The model helps to inform health technology assessment, budgeting and forecasting as well as differential pricing.
56.	Guerin-Calvert and Israilevich 2011	To provide an in-depth examination of costs incurred in hospitals for patient care and the reason for differential in prices and the factors that explain prices.	Empirical study	Hospital cost-based factors are important in examining hospital prices and price differences. Level and specialty of services, labor costs, regional costs, labor costs, and capital investments are factors that influence prices.	There is a link between improving care co-ordination, cost-reduction, and lower prices.
57.	Zuckerman et al. 2010	To examine the extent of influence of area-level measures of the supply of healthcare resources on geographic differences in spending.	Quantitative methods- descriptive and inferential statistics.	Adjustment for area-level differences in supply of medical resources did not reduce differences in top and bottom quintiles.	Differences in supply of medical resources are neither significant nor quantitatively important.
58.	Reschovsky et al. 2011	To identify the factors associated with treating high-cost beneficiaries.	Quantitative analysis	Medical specialist supply, provider for-profit status, Medicare fees and care fragmentation were associated with higher costs.	Health policy interventions must be directed towards improving care and reducing costs for complex and costly patients who consume more resources.
59.	Feldstein 1970	To improve understanding on pricing and supply of physician services.	Empirical analysis using models	Physicians have discretionary power to vary quantity of services they supply and the prices.	Physicians increase prices when patients' ability to pay improves through higher income or complete insurance coverage. Physicians reduce quantity of services provided when fees rise.
60.	Baker et al. 2014	To investigate the impact of vertical integration on hospital prices.	An empirical study using secondary data analysis.	An increase in hospital prices was observed in fully integrated organizations.	An increase in the market share of the hospitals with the tightest vertically integrated relationship associated with higher hospital prices and spending.
61.	Sheiner and Cutler 1999	To explore the source of variation in prices.	Quantitative analysis	Major differences in pricing for services is attributed to the health of the elderly population.	In spite of accounting for health of the population. Significant price variation remains. For-profit hospitals and physician prices increase spending.
62.	Koening et al. 2003	To estimate the costs of teaching hospitals.	Quantitative analysis using descriptive and inferential statistics	Costs of teaching hospitals are higher than non-teaching hospitals	There is a need to reassess the way teaching hospitals are funded.
63.	Dranove et al. 1993	To examine the relationship between prices and local market concentration for hospitals.	An empirical study using regression models.	Profit margins reduce in competitive markets followed by reduction in expenditure on quality goods and services.	Under payer driven competition, the price concentration relationship for hospitals must confirm to standard industrial organization paradigm.
64.	Bodenheimer 2005	To examine the influence of interaction of prices and	Quantitative study	Difference in price per unit of care in terms of physician fees, per day hospital payments	Limiting the supply of resources can reduce quantity and therefore costs.



		quantities of services on healthcare expenditures.		influences costs. Greater use of high-priced innovative technologies influence costs.	
65.	Jencks et al. 1994	To provide an understanding of case-mix measurement as a tool for determining appropriate payments to hospitals.	Review	The review reports six major current classification strategies- Diagnosis-related groups, Disease staging, Patient management categories, Severity of illness index, Acute physiology and chronic health evaluation, Medical illness severity grouping system.	To make prospective payment systems effective, a systematic program of research is needed.
66.	Wiley 1992	To assess the influence of the prospective payment system beyond the US and into the international arena.	Review	Financing reforms have been incorporated into Sweden, Spain, Portugal, Norway, Ireland, France, Belgium, England, Australia	Majority of countries reviewed favour a global budgeting approach to financing hospital services.
67.	Corti et al. 2018	To apply a risk-adjusted system to explain healthcare costs using routine administrative data in Italy.	Quantitative techniques	Simple age gender model explained limited variance in the total costs as compared to variance explained by diagnoses related variables.	ACG system is better in predicting healthcare costs.
68.	Hof et al. 2017	To focus on evidence on the case-mix planning problem.	Review article	Literature on case-mix planning is scarce	Case-mix planning has a fundamental economic impact on hospitals.
69.	Krishnan 2001	To examine the DRG level effects of price on hospital mergers and acquisitions.	Empirical analysis	Hospital mergers and acquisitions increase prices at DRG level. Price increases are greater in DRGs where merging hospitals gained substantial market share	DRG specific share of markets play a pre-dominant role in hospital's post-merger pricing strategy.
70.	Tenn 2011	To study the impact of hospital mergers on inpatient hospital prices for commercial patients.	An empirical study using regression models.	An increase in prices was noticed post-merger.	Increase of inpatient hospital prices for commercial patients occur post-merger of hospitals.
71.	Connor et al. 1998	To investigate the effects of market concentration and hospital mergers on hospital costs and prices.	An empirical study using econometric model.	The horizontal hospital mergers produced average cost savings that was passed on to consumers as lower prices.	Cost savings were greater for mergers of similar size hospitals, with a higher degree of duplicative services and with lower pre-merger occupancy rates. Post-merger price reductions were smaller in less competitive markets.
72.	Haas-Wilson and Garmon 2011	To estimate the post-merger price changes at the merged hospitals relative to control hospitals.	An empirical study using econometric models.	Price increases were larger at the merged hospitals relative to control hospitals.	The relative price increase at the merged hospital cannot be explained by changes in case mix, patients' severity of illness, payer mix or teaching intensity.
73.	Melnick et al. 1999	To show that mergers that reduce competition will lead to price increases.	Review paper	Regardless of ownership status price increases are seen at both the merging hospitals and their competitors.	To exploit market power non-profits and governments are more willing to increase prices.
74.	Gowrisankaran et al. 2015	To estimate a bargaining model of competition between hospitals	Empirical analysis using models.	MCO bargaining restrains hospital prices significantly. Increasing patient co-insurance reduced prices	Remedies based on separate bargaining strategies do not alleviate prices.

		and managed care organizations and to use the estimates to evaluate the effects of hospital mergers.			
75.	Ciliberto and Dranove (2006).	To investigate whether vertical integration affects hospital prices for privately insured patients.	An empirical study using regression model.	Regression analysis showed price reductions but were not statistically significant.	No evidence of higher prices were found on vertical integration.
76.	Moriya et al. 2010	To analyze the relationship between insurer and hospital market concentration and prices of hospital services.	An empirical study using econometric model.	Increased insurer market concentration is significantly associated with lower in-patient hospital prices per case.	Increased concentration of insurers is associated with substantial decreases in hospital prices. Increased concentration of hospitals is insignificantly associated with increased prices.
77.	Melnick et al. 1992	To investigate prices obtained in different types of market by largest insurance provider in California.	An empirical study using regression analysis.	Greater hospital competition leads to lower prices.	As the importance of the hospital to the insurance provider in an area increases, prices rise substantially.
78.	Liu et al. 2000	To analyze the distortion effects of hospital pricing policies in China.	Review paper	Although prices were set at low levels (that is below the costs) the actual charges for many services exceeded the regulated fees.	Hospitals violated pricing regulations as the regulated prices were not sufficient to cover up the costs and they were not held accountable for their actions.
79.	Bai 2015	To analyze the impact of law on the net price paid by the uninsured.	A quantitative study using descriptive statistics and time series analysis.	The law enables reduction of price paid by the uninsured.	For the uninsured patients who receive reduced prices for services there must be eligibility criteria set, a mandate for lower price ceiling.
80.	Batty and Ippolito 2016	To estimate the laws that reduce prices for uninsured patients.	An empirical study using secondary data analysis.	Hospital respond by decreasing the prices for uninsured patients but reduce the amount of services delivered to them.	Hospitals can do target care based on financial considerations.
81.	Barros and Martinez-Giralt 2008	To understand the provider and third-party payer negotiating practices.	Empirical models	The decision of the third-party payer depends on the surplus to be shared.	When the surplus is high, the third-party payer prefers any willing provider.
82.	Bai and Andersen 2016	To demonstrate if the chargemaster is an important revenue-seeking function.	Quantitative analysis	One-unit increase in the charge-to-cost ratio (chargemaster price divided by Medicare-allowable cost) was associated with a higher patient care revenue per adjusted discharge.	Hospitals consider the chargemaster price to be an important way to enhance revenue.
83.	Cooper et al. 2019	To analyze growth in hospital prices and physician prices for inpatient and hospital-based outpatient services using actual negotiated prices paid by insurers.	An empirical study using secondary data.	Hospital prices grew substantially faster than physician prices in the period considered.	Insurer payments for inpatient and outpatient departments increased due to growth in hospital prices. Anti-thrust enforcements, administered pricing, use of reference pricing, incentivizing referral physicians must be considered to control price growth.

<b>84.</b>	Magid et al. 2017	To present an overview of current Australian practice in pricing for safety and quality in healthcare.	Review article	Lack of conclusive evidence to promote value based re-imburement models.	Implications for infection control professionals in hospitals are wide-ranging.
<b>85.</b>	Wu 2009	To study managed care's price bargaining mechanism.	Empirical analysis using econometric model	There are two significant determinants of price discounts.	Plans with large membership are able to extract volume discounts across hospitals. Health plans that are successful at channelling patients extract great discounts.
<b>86.</b>	Cooper et al. 2018	To analyse the variation in hospital prices across the nation, variation in spending for privately insured in the United States and to examine the structure of hospital-insurer contracts.	Economic models	Prices vary across hospitals within regions and within hospitals. Health spending for privately insured differs by a factor three.	Hospital market structure is strongly associated with price levels and contract structure.
<b>87.</b>	Park et al. 2015	To examine the relationship of hospital charge variability to local health factors.	Descriptive study	Higher charges were associated with higher rates of uninsured status	Hospital charges lacked association with population health measures. The association of higher charges with uninsured status raises concerns about hospital price-setting strategies such as price-discrimination and cost-shifting.
<b>88.</b>	Robinson et al. 2015	To evaluate the impact of reference-based benefits on facility prices for orthopaedic procedures in ambulatory facilities.	Quantitative analysis	Decrease in utilization for hospital based ambulatory surgery due to increase in prices.	Consumer sensitivity increases from reference-based benefits and price differences between hospital based and free-standing ambulatory surgery procedures.
<b>89.</b>	Robinson et al. 2015	To confirm the effect of reference payment on facility choices for coloscopy	Quantitative analysis	Implementation of reference payment increased use of low-price facilities.	Implementing reference payment for colonoscopy was associated with reduced spending.
<b>90.</b>	McClintock et al. 2018	To determine how Medicaid expansion under the affordable care act of 2010 has affected hospital pricing practices for surgical episodes of care.	An empirical study using difference in difference analysis.	Cost to charge ratio increased in safety net hospitals to greater degree where Medicaid expansion was least prevalent.	Safety net hospitals have not reacted to Medicaid expansion by increasing charges to private patients.
<b>91.</b>	Lewis 1984	To understand the prospective pricing practices in the U.S.	Special article	Prospective pricing practices are based on a rationale of cost containment.	Prospective pricing stimulates the providers incentive to maximize the operating margins by reducing costs than increasing gross revenue.

<b>92.</b>	Hu 1971	To examine hospital costs and pricing behaviour in a maternity ward.	An empirical study using secondary data.	Hospital operating wards were operating in the range of economies of scale.	Hospitals were pricing at the average costs in the maternity ward.
<b>93.</b>	Robinson and MacPherson 2012	To describe two insurance benefit designs that are emerging in response to the variance in prices for similar services.	Article	Reference pricing and centres-of-excellence contracting is most useful for services for which there exists substantial variation in price	Reference pricing and centres-of-excellence contracting seek to cover essential health services while moderating the cost of using those services.
<b>94.</b>	Robinson 2011	To provide an empirical analysis of cost-shifting by examining data on hospital margins for public and private insurance in concentrated and competitive markets.	Empirical study	Hospitals in concentrated markets focus on raising prices to private insurers, while hospitals in competitive markets focus on cutting costs.	Policy makers must examine if efforts to promote clinical coordination through provider integration may interfere with efforts to restrain overall health care cost growth by restraining public payment rates.
<b>95.</b>	Bai and Andersen 2018	To examine variation in hospital prices paid by different types of commercial health insurance across various hospital systems.	An empirical study that utilizes hospital financial data to calculate prices.	Commercial HMO/PPO insurers' price were similar across major hospital systems regardless of ownership while other insurers price differed substantially across systems.	Protecting patients with other insurance from high hospital prices requires efforts by policy makers, hospitals and insurers.
<b>96.</b>	Heshmat 1989	To explain the factors to be considered for market-oriented pricing decisions for hospitals.	Article	Pricing objectives, Cost, Demand analysis and competition are factors influencing pricing decisions.	Pricing decisions made in a market-oriented hospital are radically different from past pricing practices.
<b>97.</b>	Oostenbrink and Rutten 2006	To describe the characteristics of the 'diagnosis treatment combinations' and its use for re-imburement in hospitals.	Quantitative analysis	Prices for re-imburement are based on fixed tariffs or are negotiated between insurers and hospitals or are partly based on the unit cost of health services.	Too early to assess the advantages of the DBC system.
<b>98.</b>	Sangwan et.al. 2017	To estimate the unit cost of outpatient consultation, inpatient bed day of hospitalization, surgical procedure and diagnostics for trauma care through secondary and tertiary level hospitals in India.	A quantitative study using bottom up costing method.	The cost of trauma care services was determined.	The findings may be used for undertaking future research in estimating the cost effectiveness of trauma care services.
<b>99.</b>	Kotwal et al. 2019	To explore the differences in healthcare outcomes between teaching and non-teaching hospitals for patients.	Retrospective cohort analysis	Total hospitalization costs were lower for non-teaching hospitals.	Patients admitted to non-teaching hospitals experienced better healthcare outcomes achieved at lower costs.
<b>100.</b>	Sledge et al. 1996	To compare service utilization and costs for acutely ill-psychiatric patients in a hospital	Quantitative study.	Day hospital program cost less than inpatient hospitalization.	Cost differences between the two programs are driven by hospitals relatively higher overhead costs.

		in-patient program and day hospital program.			
<b>101.</b>	Anderson 2007	To focus on relative prices in the hospital industry.	Quantitative study	Differences in charges to uninsured, self-pay and other payers.	Three main policy prescriptions to ensure uniformity in rates charged to different payers – voluntary rate setting by hospitals, litigation, and legislation.
<b>102.</b>	Keeler et al. 1999	To investigate the changing nature of hospital competition and assess its effects on hospital pricing behaviour over time.	Time-series cross-sectional study	The nature of hospital competition has shifted in a manner that price plays a significant role.	There has been a steady increase in the impact of market concentration on hospital pricing behaviour.
<b>103.</b>	Moore 1995	To explain normative strategy as a framework that demonstrates pricing as an effective tool for distributing resources and improving efficiency.	Review article	Normative strategy of pricing suggests that strategic responses to competitive market forces are constrained by the norms, traditions and values that underlie the human services industry. It is guided by considerations for both values and efficiency.	Price is influenced by values, goals and strategies of an organization.
<b>104.</b>	Pandey and Raina 2019	To analyse past and current trends in healthcare pricing for academia and policymakers (1970-2017).	Systematic literature review	Upward trend in the number of articles published on pricing.	There is a lack of focus on research on healthcare pricing
<b>105.</b>	Wang and Chen 2017	To capture the price subsidy impacts of public hospitals on quality of services in private hospitals in China.	Economic models	Medical re-imburement of public hospitals have stimulating effects on private hospital quality. The improvement of quality is based on the degree of hospital competition.	The study has great policy implications for government of China.
<b>106.</b>	Propper 1996	To examine the price responses of NHS suppliers to competition	Economic model	Price levels were consistent across specialities	Market forces have an impact on the provider pricing behaviour
<b>107.</b>	Propper and Soderlund 1998	To understand the role of competition on prices posted by sellers of medical services and the cost of producing these services in the context of UK NHS	Quantitative analysis	High variability of prices, widespread disregard for average cost pricing rules and some effect of competition on prices.	Competition has effects on prices.