

RESEARCH ARTICLES

Chapter 3: Resource Summary and Reference Tool

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The goal of the chapter is to create a repository of costing-related resources for life care planners to use in their practice. While each life care planner has the freedom to choose which costing resources and techniques to use in their costing research, they must understand and be able to articulate why they chose the resources, the techniques they chose, and why their methodology is reasonable, reliable, and generally accepted within the practice of life care planning. This chapter provides examples of articles and other sources addressing issues related to life care planning costing and is intended for educational purposes. At the end of the chapter is an appendix of database information including a figure summarizing common costing databases, as well as a list of additional resources.

Methodology

At the November 15, 2022 Costing Framework Development Committee working group meeting, committee members were asked to upload literature, research, and publications pertaining to costing, costing definitions, costing methodology, costing challenges, jurisdictional issues impacting costing, etc., to the Costing Framework Development Committee library on the IARP website. Various resources were collected, including peer-reviewed articles, white papers, opinion articles, case law, presentations from prior life care planning conferences and webinars, and websites. The uploaded resources were reviewed and summarized by the Literature Review Subcommittee. Each subcommittee member was assigned articles to review for information pertinent to costing research according to a template provided. Additionally, committee members were asked to classify the resource based upon the costing technique/source or concept discussed and to identify the key points relevant to costing for the life care plan. Additional resources were identified during the initial review and as new literature became available throughout the duration of the project. These resources were added to the list and reviewed following the same guidelines. At least two committee members reviewed each article.

Costing Life Care Plan Items

One concept introduced in the life care planning literature is the idea of a cost/charge scenario (Maniha, 2020). Use of a cost/charge scenario is a way to develop the cost/charge of a hospitalization, procedure, or surgery that has not yet occurred but has been recommended. Information needs to be

obtained regarding what has been recommended (the procedure), the reason it was recommended (diagnosis), where it will take place (facility [hospital], non-facility, inpatient or outpatient), who is involved in performing the procedure (physician, assistant surgeon, anesthesiologist), and additional items used (such as the IPG [implanted pulse generator] of the spinal cord stimulator) (Maniha, 2020).

When costing items in the life care plan, it is the responsibility of the life care planner to ensure that they are accounting for all costs associated with each identified item/service (Maniha, 2020). For some items/services, accompanying Current Procedural Terminology (CPT), Healthcare Common Procedure Coding System (HCPCS) or similar codes may be useful. Some items/services may entail using a single code, while others require multiple codes or combinations of codes. Still other items require a series of costs to be obtained from multiple costing resources and combined to determine the total cost for the recommended service. This type of complex costing research is most often required for surgeries and procedures which involve surgeon and co-surgeon fees, inpatient or outpatient facility fees, hardware or supply costs, and anesthesia fees.

Given the unique nature of life care plan cost research, there is no one defined methodology applicable to all life care plans. However, if the individual life care planner identifies all items needed by the evaluatee and employs commonly accepted costing techniques, they can develop a reliable and defensible process for obtaining costs for both simple and more complex items and services contained in the life care plan.

Usual, Customary, and Reasonable (UCR)

Maniha (2020) notes that life care plans are individualized to meet the unique needs of each evaluatee. Geographic specificity has been identified by several sources as an important consideration to ensure accurate cost data individualized to each evaluatee is used (Deutsch et al., 2005; International Academy of Life Care Planners, 2022; C. Johnson et al., 2025). Several studies analyzing the costs of common medical services and procedures within the United States have shown geographical variation in health care pricing across states and within states (Caldwell et al., 2013; Gani et al., 2017; Newman et al., 2016). Newman et al. (2016) found variation in costs for the same medical service ranged from 0.79 to 2.64 times the national average across states, as well as two- to three-fold variation between areas within the same state. Gani et al. (2017) identified variability in surgical costs across states of 15% to 51%. These studies reinforce the importance of utilizing geographically specific costs in the life care plan.

Additionally, the needs of the evaluatee, rather than funding sources, drive the planning process. Maniha (2020, p. 1) cautioned that “life care plans based upon funding considerations may endanger the health and well-being of patients who require more care, equipment, or services than financial resources allow.” In further exploration of the non-discounted charged amount versus the adjusted paid value determined by third-party sources,

Hamavid et al. (2016) concluded that amongst the 10 largest drivers of healthcare spending in the United States, adjusted paid rates averaged 23 to 55 cents per dollar charged, fluctuating greatly based on the reason for the healthcare encounter and the primary payer. Additionally, Bai and Anderson (2015) assessed the discrepancies between hospital charges and Medicare reimbursement rates across 4,483 hospitals and determined that most hospitals charged 1.5 to 4.0 times above the Medicare reimbursement rate and the top 50 hospitals in the dataset charged 10.1 times their cost for a service. The outcome of this discrepancy highlights the importance of a needs-based approach to ensure that, regardless of the status of the individual and primary payer source, the life care plan can appropriately fund the future care needs of the individual.

In addition, the life care planner uses what is usual, customary and reasonable (UCR) in the evaluatee's geographic area, rather than what is the least or most expensive (Maniha, 2020). UCR is defined by the American Medical Association (AMA, Policy H-385.923, 2024) as follows:

1. Our American Medical Association adopts as policy the following definitions:
 - a. 'Usual'; fee means that fee usually charged, for a given service, by an individual physician to their private patient (i.e., their own usual fee);
 - b. A fee is 'customary' when it is within the range of usual fees currently charged by physicians of similar training and experience, for the same service within the same specific and limited geographical area; and
 - c. A fee is 'reasonable' when it meets the above two criteria and is justifiable, considering the special circumstances of the particular case in question, without regard to payments that have been discounted under governmental or private plans.
2. Our AMA takes the position that there is no relationship between the Medicare fee schedule and Usual, Customary and Reasonable Fees.

The goal of the life care plan is to outline current and lifetime needs of an individual with a disability with associated costs. Research regarding costs requires the application of clinical judgment when determining which costing resources and techniques to use for a given item and service. Some sources may not meet all life care planning standards including geographic specificity, the discrepancy between billed versus reimbursed charges, and the age and applicability of the information (Woodard et al., 2017). Life care planners use

their education, training, and experience to determine if the costs obtained from various sources are considered UCR and whether the source being used can be considered valid and reliable.

Aggregated Data/Databases

Aggregated data is the result of collecting and analyzing data from multiple sources and presenting it in a summary format (Bestarion, 2024). As it relates to costing for the life care plan, source data, or raw claims data, are collected from various provider sources and from claim forms submitted by medical providers directly to governmental and private entities. These source data are then processed electronically by insurance companies, government agencies, and third-party organizations, and are commonly aggregated by interested parties to create datasets for various uses in healthcare industry research (Busch, 2018). The process of aggregating source data into searchable repositories for healthcare cost data is the basis for the costing databases commonly used by life care planners. When costing for the life care plan, it is often necessary to cost procedures and services that have not yet been performed, which can limit the availability of data from sources other than databases (Quinn, 2022). Additionally, because coding provides a standardized mechanism to compare costs, coding systems can be useful to life care planners in satisfying the requirement that expert opinions (i.e., life care planning opinions) are based on the scientific process (Holakiewicz & Pacheco, 2012).

Life care planners regularly rely upon databases for usual, customary, and reasonable pricing of medical services. Busch (2022) discusses the use of costing databases in determining costs for goods and services in a life care plan and provides case examples demonstrating the use of different databases for pricing professional and facility-based medical services. She states that when utilizing databases, life care planners must make clinical decisions based upon their education, training and experience to provide accurate and defensible cost projections (Busch, 2022). Maniha and Watson (2018) also discuss the use of databases for costing research.

In the 2022 Life Care Plan Survey, Neulicht et al. found that 58.65% of respondents used national databases with geographically adjusted costs 76-100% of the time to obtain costs for items in their life care plan. Categories in which databases were relied upon for costs included aggressive medical and surgical intervention, future routine medical care, projected therapeutic modalities, projected evaluations, acute medical interventions, medications, and diagnostic and education testing. Respondents who use databases reported using FAIR Health more than 51% of the time, American Hospital Directory, Genworth Cost of Care, Medical Fees in the US, Physicians' Fee Reference and VA Reasonable Charges 31-50% of the time, and HCPCS Fee Analyzer, Context4 Healthcare, National Fee Analyzer, Physician Fee and Coding Guide, Red Book and HCUP less than 30% of the time (A. Neulicht et al., 2023). In a similar study, Bate and Roughan (2025) found that 93% of life care planners reported using at least one database to determine

costs for the life care plan including Medical Fees Directory by PMIC, VA Reasonable Charge Data/Find-A-Code, American Hospital Directory, FAIR Health, Context4Healthcare, Physicians' Fee Reference, Milliman, Medata, or other (listed in order of popularity of use).

In choosing to use databases for costing, it is important to remember that data are collected from raw claims data that utilize a series of medical coding systems. To appropriately use these databases, understanding which codes are required to obtain costs for the entire treatment/procedure scenario will assist the life care planner in obtaining the most accurate cost data (Maniha, 2020). Relevant coding systems include Medical Severity Diagnosis Related Group (MS-DRG) codes for inpatient hospitalizations, International Classification of Diseases (ICD) codes specific to relevant diagnoses, CPT codes for medical services and procedures performed by physicians and other qualified healthcare providers and outpatient facility fees, HCPCS codes for products, supplies and services not included within the CPT code system, and Ambulatory Payment Classification (APC) codes used to classify hospital based outpatient services and procedures (Holakiewicz & Pacheco, 2012; Maniha, 2009). Examples of how to utilize coding to obtain costs for services, procedures and hospitalizations, and sample costing scenarios using American Hospital Directory, Find-A-Code, and FAIR Health can be found within the literature (Holakiewicz & Pacheco, 2012; Maniha, 2020; Quinn, 2022).

How to Use Databases for Determining Future Charges

A few resources provide examples of how to use costing databases to obtain costs for scenarios commonly seen within a life care plan. Maniha (2020) provides step-by-step instructions for creating a cost/charge scenario for costing items in the life care plan and examples of how use databases for both inpatient and outpatient services. Quinn (2022) explores the interface of FAIR Health, American Hospital Directory, and Find-A-Code and provides examples of how to use these databases for costing items for the life care plan. Busch (2022) walks the reader through the use of Optum 360 National Fee Analyzer, Context4Healthcare, Illinois Workers' Compensation Commission data from Optum, and FAIR Health.

Selecting a Percentile in Life Care Plan Costing

The resources below provide information about use of percentiles in a life care plan. When using cost data from aggregated data sources, the data is generally presented in the form of percentiles. FAIR Health states the following:

A percentile is a position in a distribution of values below which a specified percentage of the values fall. For example, in a distribution of 100 data points, the 70th percentile is the value in the 70th position in the lowest-to-highest array of values.

Thus, 70 percent of the values are equal to or lower than the 70th percentile value and 30 percent are equal to or higher than the 70th percentile value (FAIR Health, n.d., para.4).

The life care planner needs to determine which percentile to employ when using a database. Allison et al. (2022) suggest using the 50th percentile based on a review of charge data from their cases compared to database charge data. Busch (2022), states that this task requires judgment when selecting a percentile depending on the condition of the evaluatee and the intensity of service needed. Maniha and Watson (2018) conclude that the 75th to 80th percentile has been deemed reasonable but that a higher percentile may more accurately represent charges of a specialized provider.

The Reasonable Charges Data Tables of the U.S. Department of Veterans Affairs provide 80th percentile charges (Charges, Waivers, and Collections, 2025). The VA defines reasonable charges as charges that “are based on amounts that third parties pay for the same services furnished by private-sector healthcare providers in the same geographic area” (U.S. Department of Veterans Affairs, 2024).

According to Bate & Roughan (2025), 88 life care planners participated in a job task analysis and indicated that databases they used include Medical Fees in the U.S. (about 59%), VA Reasonable Charge Data/Find-A-Code (50%), Milliman (about 22%), American Hospital Directory (about 38%), Medata (about 15%), FAIR Health (about 32%), Context4Healthcare (about 31%), and Physicians’ Fee Reference (about 29%). Approximately 4% do not use databases and 15% responded “other.” In response to the question “What percentile do you use most often when obtaining pricing from a national database,” 10% use the 50th percentile, 33% use the 75th percentile, 43% use the 80th percentile, 2% use the 90th percentile, 6% do not use databases, and 6% responded “other.” According to the results of the life care planning costing technique survey, 43% of life care planners who use databases for costs report the 75th percentile, 22% report the 80th percentile, 11% report the 50th percentile, 3% report the 85th percentile, 2% report the 90th percentile, and 9% percent report a range of percentiles (C. B. Johnson et al., 2023).

Chargemasters

Healthcare chargemasters are comprehensive lists of a hospital’s or facility’s costs for procedures and supplies that were widely used to obtain information for use in determining Medicare reimbursement rates until 1985 when researchers identified that hospitals were manipulating their chargemaster data to increase reimbursement rates (Bai & Anderson, 2016). In addition to inflating reimbursement rates, further concerns were raised regarding inflation of chargemaster data for self-pay and out-of-network individuals who are generally billed the chargemaster price unless otherwise offered a discount by the facility (Arora et al., 2015; Bai & Anderson, 2015, 2016). In recent years, there has been a push for healthcare price transparency, made

possible by the variety of new websites and tools that provide information directly to patients about the healthcare related charges that they could face (Arora et al., 2015). As a part of the transparency act, hospitals and facilities have made chargemaster data available online. According to the 2022 Life Care Plan Survey (A. Neulicht et al., 2023), 35% of respondents reported utilizing hospital chargemasters as a part of their life care plan costing research.

As previously referenced, research has been conducted to review charge data across facilities within and across states, as well as the charge-cost ratio, and has found that the charge-to-cost markup varied across hospitals and between departments within hospitals, and that higher markups correlated with for-profit hospitals, hospitals with a large number of uninsured patients, and hospitals with market power (Bai & Anderson, 2015, 2016). The available information on chargemasters suggests that they reflect accurate non-discounted charge data for self-pay individuals when it is known where services will be obtained, but that it may be difficult to compare data within and across facilities, and within and across geographic locations, due to the variability of charge data and the multiple factors that influence hospital chargemaster data.

Online Resources

In addition to electronic resources, such as databases and chargemasters, alternate online resources are available including state and federal government-based data repositories, vendor websites for medical supplies and durable medical equipment, and pharmaceutical websites. According to the 2022 Life Care Plan Survey, 73% of respondents reported using GoodRx for online medication research, 26% reported using data provided by the Department of Labor, and 21% reported utilizing data provided by state, federal, and provincial agencies (A. Neulicht et al., 2023). While there is little peer-reviewed literature on the use of online resources in life care plan costing, it is important to uphold the standards of practice and the use of verifiable and reliable sources and to ensure adequate vetting of any online resources being considered for use in costing research. Factors to consider are location of warehouses if related to ordering supplies and durable medical equipment, additional costs such as shipping/membership, accessibility and availability to the individual items are being obtained for, geographic specificity, discounted versus non-discounted prices and fees, origin of data and how frequently data is updated, reputability of the data source, website or company, etc.

Individual Research

Individual research conducted to identify healthcare-related costs involves collecting cost data from non-aggregated sources such as direct contact with medical providers' offices or billing departments using telephone calls, emails or letters, and electronic mediums such as websites, chargemasters and fee schedules. It is often used for specific types of items in the life care plan such

as home care or facility-based care needs, transportation needs, architectural renovations, or non-medical equipment. It is accomplished through various methods which are discussed in greater detail in this chapter.

Review of Past Bills

One source for individual research cost data is past medical bills from treating providers containing the charges for past services/visits. Busch (2018) explains that, when preparing a life care plan, a review of prior billing data is useful in understanding current pricing that is being experienced by the patient; but it cannot be assumed that the billed amount by a provider is UCR for costing items in the life care plan. Busch (2018) further notes that, when analyzing prior bills, it is difficult to determine what is fair and reasonable pricing without the knowledge of how fees for healthcare services and products are generated, paid, and reconciled; and the life care planner needs to understand the source of the data and be able to evaluate if the data source is unbiased and sufficiently comprehensive. The article outlines a five-step medical audit process to assist the life care planner when pricing services presented in a life care plan (Busch, 2018). These steps include defining the scope of the life care plan review and documenting the description of the nature of the health condition; defining the data necessary for evaluation to support the life care plan review; defining parties to be interviewed that would facilitate an understanding of the subject's condition and what the condition requires for treatment and management; conducting an analysis and preparing the life care plan (in itemizing services within a life care plan, delineating services by procedure codes when applicable is helpful towards isolating pricing data for similar in-kind services); and defining market comparisons, doing analysis, and generating the life care plan report. If the life care planner determines that existing bills are not an appropriate source for UCR costing data, other costing sources should be considered (Busch, 2018).

Stajduhar et al. (2019) provide support for the idea that life care planners have the education, training, and experience to analyze the reasonableness of medical bills and reference legal precedents. Examples of legal precedents include *Womack v. Burka* (1944) in which it was determined that “through routine exposure and experience, an appropriately aligned individual establishes, over time, an expertise regarding the reasonableness of charges”; *Aetna Life Ins. Co. v. Hare* (1972) in which it was determined that “a witness in a particular field with acquired knowledge beyond that of an ordinary layperson may be deemed qualified as an expert in that field”; and *Arthur v. Catour* (2005) in which the court held that “when seeking admission of an unpaid bill into evidence, the reasonableness of that bill can be established through the opinion of a person with knowledge of those services and their customary charges.” Additionally, it is discussed that, within the community of life care planners, professional associations have been formed and standards of practice have been adopted which support the idea of expertise in opining on the reasonableness of medical charges; and professional consensus has

been culminated through in-person summits around best practices for cost analysis, further reinforcing a life care planner's education, training, and experience related to the reasonableness of past charges and future costs.

Personal Correspondence

Personal correspondence, including telephone calls, emails, and letters to current and local providers and vendors, is a long-standing method for obtaining costs for medical care, services, and supplies. In the early days of life care planning, costs were obtained solely by speaking with providers (Holakiewicz & Pacheco, 2012; Weed, 1998, 2004; Weed & Berens, 2018). According to the 2009 Life Care Planning Survey, respondents indicated their preferred sources for obtaining cost data to be (in order of most preferred to least preferred) current vendors, local vendors or providers, internet, manufacturers, a national database with geographic adjustment, catalogs, an office cost file or database, and a national database without geographic adjustment (A. T. Neulicht et al., 2010). Per the 2022 Life Care Plan Survey, 64% of respondents reported obtaining costs from current vendors or providers, as well as local vendors or providers (A. Neulicht et al., 2023). When questioned further about the use of personal contacts (calls, emails, etc.) to obtain costs for the life care plan, the majority of respondents reported using personal contacts 76-100% of the time for determining costs for home care, facility projected evaluation, medications, future routine medical care, health/strength maintenance, facility care, and projected therapeutic modalities. The use of personal correspondence to perform cost research remains a commonly used technique for obtaining cost data from providers and vendors. Maniha and Watson (2018) suggest that the life care planner have certain information available prior to initiating contact, including an authorization for release of personal information and identifying evaluatee information, when appropriate, and the appropriate CPT code(s) associated with the recommended procedure or service.

Home care is a common life care plan category researched through telephone calls. Barros-Bailey et al. (2022) proposed a survey method for conducting telephonic interviews to collect comprehensive, defensible data as applied to home care costs. Regarding the use of telephone calls, they state the following:

...in practice, gathering cost data through telephone calls is a common mode of information collection used by life care planners for other items in the life care plan. Because of its many advantages, its familiarity with life care planners, its relatively low cost to implement, and its efficiency, telephone calls was the primary data collection mode that was easily adapted to the ACSM (Attendant Care Surgery Methodology) (Barros-Bailey et al., 2022, p. 17).

Some additional benefits of using telephone calls outlined by the authors from prior literature include the ability to explore answers with respondents in real time, the ability to better assist the understanding of respondents with unfamiliar concepts, the ability to gather contextual details during discussion, not being as time intensive to the interviewer as other methods, and the increased response rate (Barros-Bailey et al., 2022; Fink, 2017). The authors reference research on call-back frequencies that suggest a quarter to a third of individuals who did not respond at the time of first contact will respond at the time of follow up, increasing the response rate (Barros-Bailey et al., 2022; Fowler, 2014). Barros-Bailey et al. (2022) include an outline of the Attendant Care Survey Instrument with a detailed explanation of how they used the instrument to collect and analyze data. While there is not one defined way to utilize telephone calls to collect research data, this is one example of how a life care planner can adapt an existing survey method or create their own standardized protocols for collecting data to ensure they can explain and defend their use of phone calls for costing items within the life care plan.

Calculating and Presenting the Costs in a Life Care Plan

For each item contained in the life care plan, the frequency and duration that each item is needed must be identified. After obtaining costs for individual items and identifying the frequency and duration of need for each item, the total cost of the life care plan can be derived. Across the foundational documents which address total costs, the recommended calculations vary from providing annual totals for each item to providing lifetime totals for each item (American Academy of Physician Life Care Planners (AAPLCP), 2014–2025; American Association of Nurse Life Care Planners (AANLCP), 2010, 2010; Deutsch et al., 2005; International Academy of Life Care Planners, 2022; C. Johnson et al., 2025). It is ultimately up to the individual life care planner to decide how best to present total costs. The life care planner needs to be cognizant of common pitfalls and errors that may occur during this process, including transcription errors; addition and multiplication errors; incorrect application of life expectancy data; errors in start and stop dates, years, and ages; providing funds for only a partial purchase of an item; range of costs problems; errors in averaging a range of costs; multiplication errors; items and services that are for a lifetime versus a limited time period, overlapping time periods, hourly and daily errors, and the potential solutions to prevent and rectify these errors (Cook, 2020).

Net Present Value

Another concept related to the total cost for care is the idea of nominal value versus present value (American Academy of Physician Life Care Planners, 2016). Nominal value refers to the stated or face value of each item as obtained by the life care planner during their cost research and does not account for future adjustments for inflation or market conditions. In contrast, present value represents the current value of a future sum of

money accounting for the time value of money, and accounts for the impact of inflation and the amount of interest that a person can earn on the awarded damages between receipt and the period when their medically related expenditure is estimated to occur. It is not uncommon for calculations in a life care plan to be adjusted to net present value when the life care plan is used in litigation. This exercise is generally performed by an economic expert, as most life care planners do not have the necessary training related to economic adjustment and valuation. This is supported by the responses recorded in the 2022 Life Care Plan Survey (A. Neulicht et al., 2023), which found that approximately 83% of respondents did not discount their life care plan to present value, with 51% of respondents reported collaborating with economists for clarification of items during the valuation process.

Collateral Source Rule

The Collateral Source Rule is a legal doctrine that prohibits admission of evidence showing that an injured party has received compensation from sources other than the damages sought against the defendant. This section outlines some of the resources available which discuss the history of the Collateral Source Rule, sources of relevant rulings in each state, and how to apply these rules to the life care plan.

There are guiding documents for life care planners to consult. The Standards of Practice for Life Care Planners, 4th Edition (IALCP, 2022, p. 15), Standard 18.d. “seeks clarity regarding jurisdictional requirements that may affect work product,” and the life care planning Consensus and Majority Statement #6 states that “life care planners shall have knowledge of relevant laws and regulations as well as local and national care standards” (C. Johnson et al., 2018, p. 15).

Recent legal decisions have required that life care planners consider medical expenses covered by third parties such as private insurance and Medicare/Medicaid that have historically been excluded from admissibility (Robinson, 2024, p. 783; B. H. Stern, 2024, pp. 828–831; B. Stern & Owen, 2022; Weed & Rutherford-Owen, 2024, p. 20). Robinson (2024), Stern (2024), and Weed and Rutherford-Owen (2024) indicate that there is considerable variability in how the Collateral Source Rule is applied from state to state. Life care planners need to know how to approach this issue and what collateral source rule approach is used in the jurisdiction where the life care plan will be presented.

Stern and Owen (2022) discuss the implications of the Collateral Source Rule for usual, customary, and reasonable pricing. They describe the approaches different states have taken regarding admitting undiscounted medical bills into evidence, including the “actual amount paid approach,” the “benefit of the bargain approach,” the “reasonable value” approach, and a hybrid approach. Field et al. (2015) address the Collateral Source Rule related to the Affordable Care Act and how to identify collateral source offsets in a

life care plan if requested. The authors introduce the Matlock chart labeled as Appendix A within the article indicating how the Collateral Source Rule is applied in each state.

Admissibility of Testimony Related to Life Care Plan Charges

Whether expert witness testimony is admissible is based on two decisions: a D.C. Circuit case, *Frye v. United States*, 293 F. 1013 (D.C. Cir. 1923), and a U.S. Supreme Court decision, [*Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 \(1993\)](#). The Frye Standard states that [expert witness](#) testimony is inadmissible unless the opinion is generally accepted by the scientific community. This standard is used by several states. With the U.S. Supreme Court case *Daubert v. Merrell Dow Pharmaceuticals Inc.*, 509 U.S. 579 (1993) and the amendment to Rule 702 of the Federal Rules of Evidence in 2000, judges were required to scrutinize not only the expert's methodology but also the underlying scientific principles. The Daubert ruling identified four factors for courts to consider in assessing the reliability of scientific evidence: whether the theory or technique can be tested; whether it has been subjected to peer review and publication; its known or potential error rate; and its general acceptance in the relevant scientific community. The Daubert standard is used to determine the admissibility of an expert's testimony in federal courts. Court cases have addressed the use of databases to assess the reasonableness of medical charges and to predict future medical expenses. For a review of court cases relevant to the costs of a life care plan, specifically *Cuevas v. Contra Costa County*, please refer to "Admissibility Considerations in Life Care Planning" (Field, 2024).

Conclusion

This chapter outlines a variety of commonly accepted costing techniques and methods identified in the life care planning literature. While life care planners have the freedom to choose which costing resources and techniques to use when gathering costing data, they are encouraged to be able to articulate their rationale for use of each particular resource, how it is intended to be used, and why it is considered reasonable, reliable, and generally accepted within the specialty practice of life care planning. It is also important that life care planners are familiar with available literature and resources that discuss costing techniques to ensure a comprehensive understanding of costing techniques. While this review provides a repository of currently available literature and resources, there is information regarding costing research that may not be reflected in this chapter. As the field of life care planning evolves, it is the responsibility of the life care planner to stay abreast of research and data that become available. Further research into topics pertinent to life care planning costing techniques is encouraged.



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References

- Allison, A., Corwin, A., Albers, M. J., White, H., & Taylor, R. H. (2022). An analysis of usual, customary, and reasonable charges in life care planning. *Journal of Life Care Planning*, 20(2), 5–19.
- American Academy of Physician Life Care Planners. (2016). *Present Value: The Real Cost of a Life Care Plan*.
- American Academy of Physician Life Care Planners (AAPLCP). (2014–2025). *Standards of Practice*. <https://aaplcp.org/About/PracticeStandards.aspx>
- American Association of Nurse Life Care Planners (AANLCP). (2010). *Nurse Life Care Planning Standards of Practice*.
- Arora, V., Moriates, C., & Shah, N. (2015). State of the art and science: The challenge of understanding health care costs and charges. *American Medical Association Journal of Ethics*, 71(11), 1046–1052.
- Bai, G., & Anderson, G. F. (2015). Extreme markup: The fifty US hospitals with the highest charge-to-cost ratios. *Health Affairs*, 34(9), 922–928. <https://doi.org/10.1377/hlthaff.2014.1414>
- Bai, G., & Anderson, G. F. (2016). US hospitals are still using chargemaster markups to maximize revenues. *Health Affairs*, 35(9), 1658–1664. <https://doi.org/10.1377/hlthaff.2016.0093>
- Bate, B., & Roughan, J. (2025). Nurse Life Care Planning Practice & Protocols: 2024. *Journal of Nurse Life Care Planning*, XXV(2), 15–37.
- Bestarion. (2024, June 27). *Aggregate data: A comprehensive overview*. <https://bestarion.com/aggregate-data/>
- Busch, R. M. S. (2022). Healthcare service costing: Pricing perspectives and case studies for life care planners. *Journal of Life Care Planning*, 20(2), 21–35.
- Caldwell, N., Srebotnjak, T., Wang, T., & Hsia, R. (2013). “How much will I get charged for this?” Patient charges for top ten diagnoses in the emergency department. *PLOS One*, 8(2). <https://doi.org/10.1371/journal.pone.0055491>
- Charges, Waivers, and Collections, 38 C.F.R. pt. 17 (2025).
- Cook, D. (2020). It’s All About the Numbers. *The Journal of Nurse Life Care Planning*, 20(4), 12–15.
- Deutsch, P., Allison, L., & Reid, C. (2005). An introduction to life care planning: History, tenets, methodologies & principles. In P. Deutsch & H. Sawyer (Eds.), *A guide to rehabilitation* (Vol. 1, p. 5.1-5.30). AHAB Press, Inc.
- FAIR Health. (n.d.). *Methodologies*. FAIR Health. <https://www.fairhealth.org/methodologies>
- Field, T. (2024). Admissibility Considerations in Life Care Planning. In T. Rutherford-Owen, M. Barros-Bailey, & R. Weed (Eds.), *Life care planning and case management across the lifespan* (5th ed., pp. 793–809). Routledge.
- Field, T., Johnson, C. B., Choppa, A. J., & Fountaine, J. D. (2015). The collateral source rule and the Affordable Care Act: Implications for life care planning and economic damages. *Journal of Life Care Planning*, 13(3), 3–16.
- Fink, A. (2017). *How to conduct surveys: A step-by-step guide* (6th ed.). SAGE.
- Fowler, F. J. (2014). *Survey research methods* (5th ed.). SAGE.
- Gani, F., Makary, M., & Pawlik, T. (2017). The Price of Surgery: Markup of Operative Procedures in the United States. *Journal of Surgical Research*, 208, 192–197. <https://doi.org/10.1016/j.jss.2016.09.032>

- Hamavid, H., Birger, M., Bulchis, A., Lomsadze, L., Joseph, J., Baral, R., Bui, A., Horst, C., Johnson, E., & Dieleman, J. (2016). Assessing the Complex and Evolving Relationship between Charges and Payments in US Hospitals: 1996-2012. *PLOS ONE*, 11(7). <https://doi.org/10.1371/journal.pone.0157912>
- Holakiewicz, L., & Pacheco, M. (2012). Coding and costing research for the life care plan. *Journal of Life Care Planning*, 11(2), 15–25.
- International Academy of Life Care Planners. (2022). *Standards of practice for life care planners* (4th ed.). The Life Care Planning Section of the International Association of Rehabilitation Professionals.
- Johnson, C. B., Pomeranz, J. L., Yu, N. S., Robert, E., Davis, E., Woodard, L., & Penilton, D. (2023). 2022 Life care planning summit: Costing technique, survey results and development of a costing framework in support of the life care planning specialty. *Journal of Life Care Planning*, 21(1), 31–68.
- Johnson, C., Pomeranz, J., & Stetten, N. (2018). Consensus and majority statements derived from life care planning summits held in 2000, 2002, 2004, 2006, 2008, 2010, 2012, 2015, and 2017 and updated via Delphi study in 2018. *Journal of Life Care Planning*, 16(4), 15–18.
- Johnson, C., Williams, C., MacKenzie, A., & Feerick, B. (2025). Consensus and Majority Statements Since 2000: Updated at the 2025 Life Care Planning Summit. *Journal of Life Care Planning*, 23(2), 72–79. <https://doi.org/10.70385/001c.142260>
- Maniha, A. (2020). Components of the cost/charge scenario as utilized in the life care plan. *Journal of Life Care Planning*, 18(4), 13–34.
- Maniha, A., & Watson, L. (2018). Life Care Planning Resources. In R. O. Weed & D. Berens (Eds.), *Life care planning and case management handbook* (4th ed., pp. 729–757). Routledge. <https://doi.org/10.4324/9781315157283-30>
- Neulicht, A., Riddick-Grisham, S., Barros-Bailey, M., Knott, M., Maxwell, A., Albee, T., Marcinko, D., Mitchell, N., & Robinson, R. (2023). Life care plan survey 2022: Process, methods, and protocols – A 20-year perspective. *Journal of Life Care Planning*, 21(3), 5–112.
- Neulicht, A. T., Riddick-Grisham, S., & Goodrich, W. R. (2010). Life care plan survey 2009: Process, methods, and protocols. *Journal of Life Care Planning*, 9(4), 131–200.
- Newman, D., Parente, S. T., Barrette, E., & Kennedy, K. (2016). Prices For Common Medical Services Vary Substantially Among the Commercially Insured. *Health Aff (Millwood)*, 35(5), 923–927. <https://doi.org/10.1377/hlthaff.2015.1379>
- Quinn, J. (2022). UCR Databases. *Journal for Life Care Planning*, XXII(1), 15–19.
- Robinson, R. H. (2024). Forensic issues in life care planning. In T. Rutherford-Owen, M. Barros-Bailey, & R. Weed (Eds.), *Life care planning and case management across the lifespan* (5th ed., pp. 765–791). Routledge.
- Stajduhar, L. E., Cary, J. R., Choppa, N. J., & Gamez, J. N. (2019). Performing a review of past medical bills to determine the reasonableness of costs. *Journal of Life Care Planning*, 17(2), 51–55.
- Stern, B. H. (2024). A plaintiff's attorney's perspective of life care planning. In T. Rutherford-Owen, M. Barros-Bailey, & R. Weed (Eds.), *Life care planning and case management across the lifespan* (5th ed., pp. 811–833). Routledge.
- Stern, B., & Owen, T. R. (2022). Collateral source rule approaches and its implications for usual, customary, and reasonable pricing. *Journal of Life Care Planning*, 20(1), 27–41.
- U.S. Department of Veterans Affairs. (2024). *Veterans Affairs, Health Care, Community Care, Payer Rates and Charges*. <https://www.va.gov/COMMUNITYCARE/revenue-ops/payer-rates.asp>

- Weed, R. O. (1998). *Life care planning and case management handbook* (1st ed.). CRC Press.
- Weed, R. O. (2004). *Life care planning and case management handbook* (2nd ed.). CRC Press.
- Weed, R. O., & Berens, D. (2018). *Life care planning and case management handbook* (4th ed.). Routledge.
- Weed, R. O., & Rutherford-Owen, T. (2024). Life care planning: Past, present, and future. In T. Rutherford-Owen, M. Barros-Bailey, & R. Weed (Eds.), *Life care planning and case management across the lifespan* (5th ed., pp. 3–24). Routledge.
- Woodard, L., Kattman, E., & Spencer, S. (2017). Complexities of surgery pricing and implications for life care planners. *Journal of Life Care Planning*, 15(1), 3–8.

Appendix of Database Information

American Hospital Directory

Website: <https://www.ahd.com/>

A subscription is required for use of this database. Hospital cost report submission is approximately three months after the end of the hospital's fiscal year with a processing lag time of at least six months before data is available in public files. AHD updates their files once each quarter when public files are updated. AHD data is sourced from the Centers for Medicare and Medicaid Services (CMS), including Medicare Provider Analysis and Review (MedPAR), the Medicare Hospital Outpatient Prospective Payment System (OPPS), the Healthcare Cost Report Information System (HCRIS), and proprietary sources. Hospital names, addresses, telephone numbers, and websites are continually updated as information becomes available.

Centers for Medicare and Medicaid Services (CMS)

Website: <https://www.cms.gov/medicare/payment/fee-schedules>

CMS provides free online access to a Medicare Physician Fee Schedule. The schedule is used as a primary method of payment providers for services paid for by Medicare. Since Medicare is an insurance/collateral resource, the fee schedule use may be limited. The life care planner might consider its use as a comparison to other charge databases or fee schedules or for coding information.

Context⁴ Pricing™ UCR Online Fee Viewer

Website: <https://www.context4healthcare.com>

A subscription is required for use of this database. UCR data is based on semi-annual collection of several billion healthcare claims and use of most recent two years of claims data. Context⁴ Pricing™ UCR Online Fee Viewer generates UCR pricing for medical, dental, anesthesia, outpatient, and inpatient services and HCPCS with use of a procedure code, service date, and zip code. Context4Healthcare uses unaltered source data (not altered by payer adjudication processes) calculated from most recent data and arrayed from the 25th through the 95th percentile. Regional differences in healthcare costs are allowed for with almost 500 geo-zip regions identical to the areas identified by the U.S. Census Bureau.

FAIR Health Subscription Database

Website: <https://www.fairhealth.org/>

A subscription is required for use of this database. Per a FAIR Health Fact Sheet (https://s3.amazonaws.com/media2.fairhealth.org/resource/asset/FH_Overview_-_Fact_Sheet.pdf), FAIR Health's database contains data from commercial medical and dental claims data. Data is taken from over 50 billion claim records from 2002 to present, including data from more than 75 payors and administrators who insure or process claims for both fully insured and

self-insured plans. New data is added monthly, with more than 4 billion additional claim records per year. The database also includes Medicare claims data, which is separate from commercial claims data. FAIR Health receives Medicare Parts A, B and D claims data for all 50 states and Washington, DC, and claims are from 2013 to present. New Parts A and B data received quarterly and Part D data are added annually.

Claims data is geographically specific and includes 493 geozips covering all 50 states; Washington, DC; Puerto Rico; and the US Virgin Islands. Standard FH[®] Benchmarks modules include nationwide FH[®] Charge Benchmarks and FH[®] Allowed Benchmarks by category (e.g., medical, dental, facility), geography and percentiles. FAIR Health's data products are widely used by commercial insurers and self-funded plans, employers, hospitals and healthcare systems, government agencies, consumers, policy makers, researchers, and others. FAIR Health data is referenced in statutes and regulations around the country and have been designated as the official source of cost information for a variety of state health programs.

FAIR Health Consumer

IMPORTANT NOTE: According to Fair Health Legal: The consumer version is **NOT** to be used for the purpose of developing Life Care Plans and/or completing past medical bill reviews. FAIR Health Consumer is a tool for consumers to use to estimate their healthcare expenses.

Per personal communication from Allison Schneiders, Chief Compliance Officer and Deputy General Counsel, of FAIR Health on July 29, 2024, "all commercial and litigation uses of the consumer website are expressly prohibited by the terms of use of the consumer website. Each time a user wishes to access data on the site, a user must expressly accept terms and conditions that limit use of the site and data to uses "solely for personal, consumer use, and not for any commercial, professional, research, litigation or other purposes." Any life care planner using the FAIR Health Consumer website for expert use in litigation is, therefore, in clear violation of the website's terms of use and of FAIR Health's intellectual property rights.

Find-A-Code

Website: <https://www.findacode.com/>

A subscription is required for use of this database. Find-A-Code was designed as a coding and billing tool to provide detailed information on medical codes across medical coding systems. With a subscription, there are options for add-ons that can provide access to costing data. With these add-ons, Find-A-Code offers UCR fees gathered from the U.S. Department of Veterans Affairs (VA) using geographically adjusted charges and the 80th percentile conversion factors. The data is updated by the VA annually on or around January 1 each year. Find-A-Code provides articles on its website about a number of topics, including Outpatient Facility Pricing (<https://www.findacode.com/articles/facility-pricing-yes-we-now-have->

[facility-pricing-36652.html](https://www.findacode.com/articles/va-ucr-inpatient-fees-36652.html)) and Understanding UCR Inpatient Fees Used on DRGs (<https://www.findacode.com/articles/va-ucr-inpatient-fees-36658.html>)

Metadata

Website: <https://medatalookup.com/>

A subscription is required for use of this database.

Medical Fees

This annual directory, published by Practice Management Information Corporation (PMIC), is a listing of medical procedure codes, descriptions, UCR fees at the 50th, 75th and 90th percentiles, Medicare fees, and Medicare relative value units. It is based on a collaboration and contributions from Context4Healthcare, Inc. and Practice Management Information Corporation (PMIC). PMIC takes raw CPT/UCR data from Context4Healthcare, Inc., adds comprehensive introductory materials and full CPT descriptions, and then applies proprietary formulas to estimate fees for medical services and procedures. Context4Healthcare, Inc. obtains charge data from a variety of sources including third-party payers, clearinghouses, practice management system vendors, billing services, universities, medical practices, hospitals, and CMS. A database of more than 600 million submitted charges is also utilized. The directory states that it provides “complete, accurate, and statistically valid information” regarding UCR and Medicare fees.

The percentile fees presented in this directory are based on national fee data. A Geographic Adjustment Factor (GAF) is a multiplier used to determine a more accurate fee for a specific location of medical practice. GAF is calculated using data from the Medicare Physician Fee Schedule and is a weighted average of the work, practice expense, and malpractice expense components of the Medicare Physician Fee Schedule.

Physicians’ Fee Reference

Physicians’ Fee Reference[®] is published annually by Wasserman Medical Publishers. It provides derived fee information from CMS’ LDS Standard Analytical Files FY 2022 and extrapolates additional information using relative values methodologies. Fee amounts are “national” amounts unless they are adjusted using a geographic multiplier. Fees are provided in 50th, 75th and 90th percentiles. The database provides facility fees (hospital, ambulatory surgical center or nursing home) and non-facility fees (office-based group or individual medical practice). Physician rates are generally lower in a facility because the facility charges separately for overhead, staff, equipment, and supplies. The non-facility rates are higher as the physician is covering the overhead expenses.

Geographic Adjustment Factors (GAFs) are identified in part from Medicare’s Carrier Region/Locality GPCIS, which are used to adjust national payment amounts in the Medicare Physician Fee Schedule, combined with

other data such as government wage indices and regional economic information. They do not take into consideration localized economic disparities within large urban areas.

Reasonable Charges Data Tables of the U.S. Department of Veterans Affairs

Website: <https://www.va.gov/COMMUNITYCARE/revenue-ops/payer-rates.asp>

The Veterans Affairs (VA) website provides access to the VA's reasonable charge rules, notices, and applicable sections of the *Federal Register* (U.S. Department of Veterans Affairs, 2024). The VA's 80% percentile reasonable charges methodology was established in 1999 (U.S. General Accounting Office, (<https://www.gao.gov/assets/hehs-99-124.pdf>) and codified in the Code of Federal Regulations (38 C.F.R §17.01) for inpatient and outpatient facility and professional services.

The regulations are periodically updated and reported in the *Federal Register*. The most recent updates were January 1, 2022, for outpatient and professional services and October 1, 2021, for inpatient services. The publicly available reasonable charge data tables for outpatient and inpatient charges are updated annually, and there is no charge to access this data.

The VA establishes national reasonable charges for five categories of charges: 1) inpatient facility; 2) outpatient facility; 3) skilled nursing facility (SNF/sub-acute inpatient facility); 4) physicians; and 5) nonphysician providers. The inpatient tables provide data by Medicare Severity Diagnosis Related Group for acute inpatient facility per diem charges and for skilled nursing facility/sub-acute inpatient facility. The outpatient and professional tables provide charges for observation care, ambulance and other emergency transportation, outpatient facility, physician and professional services, dental, durable medical equipment and supplies, and other outpatient facility charges. Additionally, there are tables that provide geographic specificity updates to account for charge variability related to location.

Find-A-Code (see above) is an online, subscription-based coding and billing service that offers the VA reasonable charge data in a format that the life care planner may find easier to use than the publicly available tables on the VA website.

Workers' Compensation Fee Schedules

State-specific provider fee schedules are available. The life care planner might consider using these for comparison to other charge databases or fee schedules or for coding information.

Table 1. Summary of Common Costing Databases

Database	Data Provided	Source of Data	How Often Data is Updated	Geographic Specificity	Format of Data
American Hospital Directory (AHD)	Hospital cost report data by individual hospital by use of DRG, SPC or CPT/ HCPCS	Centers for Medicare and Medicaid Services (CMS) including Medicare Provider Analysis and Review (MedPAR), the Medicare Hospital Outpatient Prospective Payment System (OPPS), the Healthcare Cost Report Information System (HCRIS), and proprietary sources	Once per quarter	Hospitals identified using zip code	Average length of stay, average charge, average payment, and average cost.
Context4 Healthcare (C4H)	UCR pricing for professional and facility fees, dental, anesthesia, and DME using corresponding medical codes	Semi-annual collection of several billion healthcare claims from third-party payers, clearinghouses, practice management system vendors, billing services, universities, medical practices, hospitals, and Centers for Medicare and Medicaid Services (CMS)	Semi-annually	Almost 500 geo-zips with geographically appropriate costs determined based on the zip code used for search	25 th – 95 th percentile
FAIR Health	UCR pricing for professional and facility fees, dental, anesthesia, and DME using corresponding medical codes	Medicare claims data (charges) and over 45 billion claim records from commercial medical and dental claims data	Semi-annually	493 geozips covering all 50 states, Washington, DC; Puerto Rico; and the US Virgin Islands	25 th – 95 th percentile
Find-A-Code (FAC)	UCR pricing of professional and facility fees, anesthesia, and DME by the use of corresponding medical codes	Department of Veterans Affairs charges	Quarterly	Geozips based on zip code	80 th percentile
Medata	UCR pricing for physician, pharmacy, and outpatient facility fees using corresponding medical codes	Over 700 million individual medical charges	Annually	By Zip code	50 th through the 99 th percentile
Medical Fees 2024 – Practice Management Information Corporation (PMIC)	UCR pricing of professional fees using CPT code	Takes raw UCR data from Context4Healthcare, Inc. and applies proprietary formulas to estimate fees for medical services and procedures.	Annually	GAF multiplier based on zip code	50 th , 75 th , and 90 th percentiles
Physicians' Fee Reference®	UCR charges for professional fees using CPT code	Primarily from CMS' Limited Data Set (LDS) Standard Analytical Files for the most recent year, as well as third-party payers, clearinghouses, practice management systems, billing services, universities, and medical practices	Annually	GAF multiplier based on zip code	50 th , 75 th , and 90 th percentiles

Database	Data Provided	Source of Data	How Often Data is Updated	Geographic Specificity	Format of Data
Reasonable Charges Data Tables of the U.S. Department of Veterans Affairs	UCR data for professional and facility fees using procedure code	Based on amounts that third parties pay for the same services furnished by private sector health care providers in the same geographic area	Annually	GAF multiplier based on zip code	80 th percentile

List of Additional Resources

De Saint Phalle, E., & Clay, A. (2018, December). The cost of future medical care and Cuevas. Plaintiff magazine.

Gabel, J. (2014). Data Sources for Establishing Payment Rates for Out-of-Network Emergency Room Services. NORC at the University of Chicago.

Research and Planning Consultants, LP (2023). Determining usual, customary, and reasonable charges for healthcare services [white paper]. [Determining-Usual-Customary-and-Reasonable-Charges-for-Healthcare-Service_Whitepaper_7-1-2023.pdf](#)

The website of the law firm Matthiesen, Wickert & Lehrer, S.C. provides information regarding collateral source rules and a chart of collateral source rules by state ([Medical Expenses, Ins. Write-Offs, and the Collateral Source Rule](#)). The inclusion of this resource is not an endorsement of the law firm but instead serves the purpose of providing a resource that has been shown to be regularly updated. It is critical that the individual life care planner confirm with other sources that the information is accurate and up to date.