

The Venn Diagram and the Life Care Plan: Where Forensic Economics and Vocational Rehabilitation Overlap

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Abstract. Oftentimes, the variable roles of the Forensic Economist and Vocational Rehabilitation Counselor overlap during development of a Life Care Plan and subsequent identification of applicable economic losses and costs. This article differentiates the various roles of these professionals. It is recommended that communication be facilitated between these professionals to prompt development of not only a quality evaluation and projection, but also to enable the courts to discern individual, professional roles.

When Robert Graves wrote his first Claudius historical novel, critics accused him of taking a bit here from Tacitus and the rest from Suetonius dismissing the novel as an amateurish attempt to write serious history. Graves struck back and listed the entire bibliography he relied on in writing first *I, Claudius* and then *Claudius the God*. The bibliography ran to over twenty pages. Your author was struck by this thought as he was assembling the reading for an attempt to write a credible paper on the overlap of forensic economics with vocational rehabilitation. As Gore Vidal was to say of his historical novel, *Julian*, in relation to Graves, “I have not read this much,” I can say in relation to the vast library of articles and research clearly surpassing mine that I have not read enough.

Acknowledging this shortcoming, your author shall try his best to establish an understanding of the overlap arising from the two different tasks of the forensic economist (FE) and the vocational rehabilitation (VR) expert. Although the two disciplines share an end goal – to support an argument allowing plaintiff counsel to argue for an award of damages for his or her client – the manner and method of our work to this end goal is radically different. Since difference and not similarity is at the heart of our work methods, finding an area of overlap is a noble goal in itself and should lend to a better cooperation for the benefit of plaintiff and defendant counsels in future. If we are not on the same page as to the nature and extent of the damages to be quantified, our credibility is called into question in court and we have failed in our mutual goal of either supporting a quantifiable damage position for the plaintiff side, or demonstrating the fallacious nature

of the quantification of damages made if on the defense side.

I am delighted at the thought of a collaboration with a fellow forensic economist, Wesley Austin, if in separate stand-alone articles, on the subject matter of the role of the FE, first to a client, usually a law firm who themselves have a client of either a plaintiff or defendant persuasion, and to the court, to the trier of fact, and to posterity. Although the FE plays a minor part in the major role of a lawsuit – establishing liability – once this liability is established someone bears the burden and responsibility of recommending the size of the trial date dollar award which would either make the plaintiff financially whole, if liability is proven, or the deserving award to the defendant of “you owe nothing,” if liability is not proven. Of course, there is also the entire spectrum of a settlement award between these two dollar results.

In settlement negotiations, the Edgeworth-Pareto-Bowley two-dimensional box diagram showing how a result slides in favor of the leverage of one party over another has as much if not more relevance than any supposed science of forensics, whether economic or vocational.¹ Anyone who has had the misery to sit through a mediation consultation conducted by a former judge who never allows the warring parties to sit together and instead paints a picture in one room of how strong the position of the defendant is to the plaintiff while in the next moment moves to a second room to demonstrate to the defendant how strong the position is of the plaintiff quickly realizes the capricious nature of justice in America.

Justice

In America, we mete out justice with money. The FE's role is to lend helpful information to the trier of fact so that the trier of fact can mete out an exact amount of money deserving to flow or deserving not to flow from one party to the other. This conclusion occurs after having listened to all the bickering, all the he said-she said arguments, and the various and many instructions of what counts as evidence and what does not count as evidence from the court, not to mention the two mathematical contradictions of the economic damage inflicted on a plaintiff, first from a plaintiff FE then a rebuttal one from the Defense FE. Lord help the trier of fact if the lawsuit also happens to be a cross complaint with now two plaintiffs, each party with their own FE and each party with their own rebuttal FE. When you think on it, considering how hard it is to get two people to agree on something as simple as the price of an old rocking chair at a yard sale, it's quite amazing that the legal process results in a firm, declarative dollar amount, whether \$10,000,000 or \$0. On those occasions where liability is proven for the plaintiff but no FE was hired to quantify the economic damages, it can truly be said that the equitable foundation of the legal process has broken down.²

Venn Diagram

I envisage a Venn diagram consisting of Forensic Economics (FE) to the left and Vocational Rehabilitation (VR) to the right. The overlap is the life care plan (LCP), modalities listed and quantified in nominal terms to the right, and brought to present or trial date value to the left. To the left is obviously economic theory; to the right is obviously rehabilitation theory. As we move from theory, the left side does a lot of math, incorporates a number of statistical tables, quantifies in trial date dollars the life care plan that comes over from the right in order to determine along with other economic damage items a sum of money in trial date dollars which makes the damaged party or plaintiff whole. Meanwhile, the right side deals with a whole assortment of diagnostics and modalities that will bring the damage party the best possible life he or she can have under the worst possible conditions resulting from a tort proven to be caused by the defendant (See Figure 1).

An economist has no way of knowing whether a modality and/or procedure of 10 years with an estimated cost of \$5,000 per year will do any good in improving the life of a plaintiff harmed by a tort. What he or she does know is that if this is a cost to be borne by the plaintiff over the next 10 years, then a present value quantification needs to be made at trial date which awards enough money to enable the plaintiff to pay for this service. In other words, knowledge of the legiti-

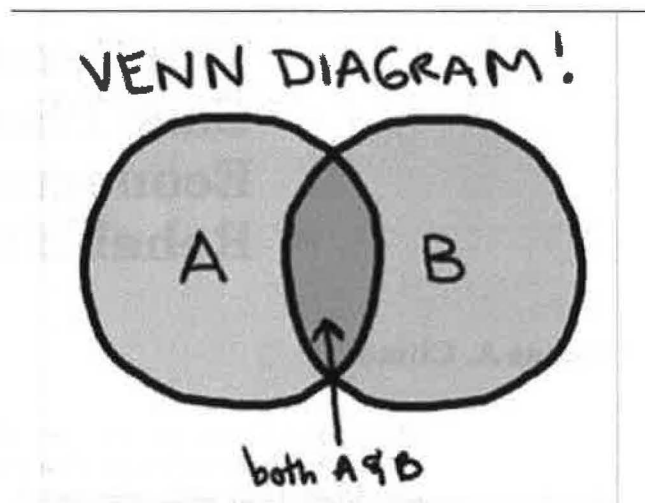


Figure 1. "A" is Forensic Economics, "B" is Vocational Rehabilitation, and "both A & B" is the Life Care Plan.

macy of the modality or procedure is that of the VR while knowledge of the appropriate interest rate to employ to bring the cost of this treatment as estimated by the VR to present value is that of the FE. The overlap consists of the number of years and estimated annual cost of this service by the VR, and the interest rate and present value methodology applied to these years and costs by the FE. One skill and its report relate to the remedy of the physical condition; the other relates to the remedy of the financial condition. This is the art and science of the overlap – how to translate a physical condition into a financial one.

Review of the Literature – From a FE Point of View

A more simplistic explanation of the association between the two fields of FE and VR could not be more simply stated. In so doing, has your author denied a more thorough and intense look at an expanded and inter-disciplinary approach of our association? To answer this question leads directly into a review of two current pieces of literature among the vast library of research that your author has not read nearly enough. We begin with the man most associated with writing on this overlap in the field of forensic economics, Michael L. Brookshire. Dr. Brookshire's *Vita*, dated February 1, 2014, runs to fourteen pages, lists four book publications, and is available at: <http://www.forensic-economics.org/pdf/Brookshire%20February%201%202014%20vita.pdf>. The *Vita* goes on to list his entire collection of refereed articles and publications which itself runs to four pages, kicked off with this piece of literature planned for review here.

Dr. Brookshire uses "FE" for forensic economist, but prefers "VE" for vocational rehabilitation expert rather than "VR" for Vocational Rehabilitation. He launches

his analysis with a handoff simile. A simile is a metaphor, but not all metaphors are similes.

The purpose of this chapter is to highlight appropriate roles and relationships between FEs and VEs and to suggest an effective method of handoff (as an Olympic runner would pass the baton in a relay race) from VE analysis and conclusions to loss calculations by an economist. Past practices will be reviewed and possibilities for future, interdisciplinary research and work will be discussed.

The Chapter is organised around eight possible factors that might be considered in differentiating the post injury scenario for an injured worker from the preinjury scenario. Table 21.1 provides an overview of these eight factors. The first two factors have received the most attention and are treated in the most detail.

The eight factors that Brookshire lists in Table 21.1, including the first two that he says have received the most attention, are in order:

Factor 1 – Earnings Level; Factor 2 – Work Life Expectancy; Factor 3 – Fringe Benefits; Factor 4 – Earning Growth Rates and Discount Rates; Factor 5 – Age-Earnings Growth Rate; Factor 6 – Household Services; Factor 7 – Medical, Education, Training, and Support Costs; and Factor 8 – Less Tangible Damages.

Your author takes exception to the exclusion of Factor 4 — Earning Growth Rates and Discount Rates — and Factor 6 — Household Services — as having received less attention than Factors 1 and 2 — Earnings Level and Work Life Expectancy. As the interest rate is the price of money, and the FE is pricing money to a trial date, the most suitable interest rate to use in the discounting process has a rich and voluminous chronology of publications commencing with the spectacular work of Irving Fisher in his immortal, *The Theory of Interest, as determined by impatience to spend income and opportunity to invest it*, published in 1930. The quality of this book has no equal, and is still suitable as a textbook in an undergraduate course on the interest section of the theory of finance. It develops a full understanding of the way the price of money works in a dynamic economy, first as text, then in geometry or graphs, and, finally in mathematical formulae. Every forensic economist owes a debt of gratitude to this classic.

Next, the single most important case in the field of forensic economics has to do with the subject matter of discounting for losses, *Jones & Laughlin Steel Corp. v. Pfeifer*, 103 S. Ct 2541, or 462 U.S. 523 (1983). Justice Stevens delivered the opinion of the United States Supreme Court, which sets out a framework for how damages in a personal injury case should be presented by an economic expert. The court is very careful not to

specify a particular set of methods, as urged on it by various amici briefs that were filed, saying:

... our review of the foregoing cases leads us to draw three conclusions. First, by its very nature the calculation of an award for lost earnings must be a rough approximation. Because a lost stream can never be predicted with complete confidence, any lump sum represents only a 'rough and ready' effort to put the plaintiff in the position he would have been in if not injured. Second, sustained price inflation can make the award substantially less precise. Inflation's current magnitude and unpredictability create a substantial risk that the damages award will prove to have little relation to the lost wages it purports to replace. Third, the question of lost earnings can arise in many different contexts. In some sectors of the economy, it is far easier to assemble evidence of an individual's most likely career path than others.

Instead of providing specific methods, the court provides a list of the issues that must be addressed in the report and the general framework for the methodologies that can be used to address those issues. The *Pfeifer* court indicated that if a court accepted a "below market" discount rate approach, a trial court is not likely to be reversed if it adopts a below market rate between 1% and 3% and "explains its choice" — always use the real rate of interest. The court also affirmed its earlier decision in *Norfolk and Western Railway Company v. Liepelt*, 440 U.S. 490 (1980) that lost earnings must be projected in after-tax terms.

Finally, of the modern and latter-day pieces written on the subject of interest rate and discounting, your author inquired of his Fellows in the American Academy of Economic and Financial Experts (AAEFE) and the National Association of Forensic Economics (NAFE) through the following List-Serve communiqué: "Of all the writings on the subject of the correct interest rate to use in economic damages discounting over the past five or so years, which article would you want to tell an outsider most faithfully reflects the movement in FE thinking from Fisher's original and foundational work through the *Pfeifer* opinion to today." (Albrecht & Krueger, 2007).

In this article, theory is connected with practices through both earnings streams and the discounting of the earning streams with a rate of interest. My favorite quote from this excellent article is:

A calculation that discounts a nominal future amount with a real discount rate or discounts a real future amount with a nominal discount rate would indicate an unacceptable lack of economic understanding or attempted deceit.

Like Fisher and the *Pfeifer* court before them, Albrecht and Krueger have successfully parsed the good from the bad in forensic economic practice as it

mirrors or fails to mirror economic theory, and, as in my favorite quote above, have left the FE industry finely tuned for addressing the price of money in litigation matters.

As to the central position of the household services issue in forensic economics, anytime this subject appears for discussion in either of the two main List-Serves of the FE profession mentioned above – NAFE or AAEFE — a thread longer than Route 66 or the TransCanada 1 lasting two or three days soon follows debating the latest thinking on this matter. Recently, a modest inquiry on the AAEFE List-Serve of whether a personal consumption deduction should be taken as an added household services deduction in personal injury litigation spanned a whole week with over one hundred comments without a conclusive answer, but leaning to “no.” This despite the bible for quantifying household services – *Dollar Value of Day* published by Expectancy Data, the economic demographers — having a line item for this deduction.

Returning to Brookshire, he tirelessly examines throughout the remainder of his Chapter each of these eight factors in detail. The real advantage of this detailing is that it helps to hone the left-side Venn Diagram by itemizing factors that make-up the circle of trade of the FE. The left-side of the Venn Diagram is no longer merely “Forensic Economics” but is now identified by the eight factors of the FE trade as described by Brookshire along with the support of economic theory (See Figure 2).

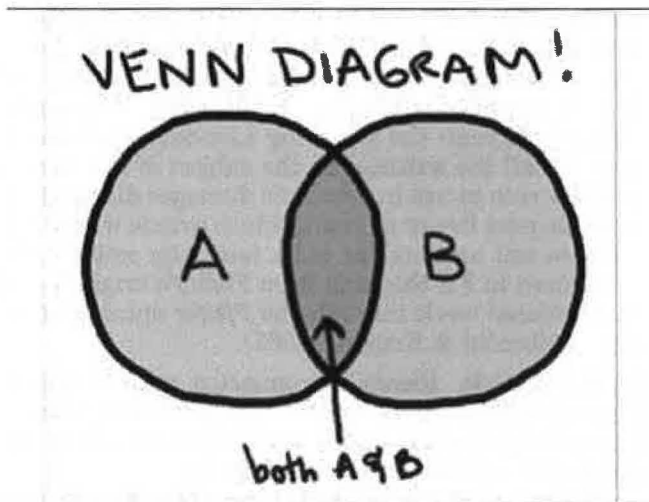


Figure 2. A” is the 8 factors listed by Brookshire for the FE along with economic theory, with x being the number of these factors which overlap with the life care plan along with rehabilitation theory prepared by “B,” the VR. “Both A & B” is the overlap of x with y , where y is the subset utilized by a VR in preparing a life care plan, this as part of the total z themes comprising the circle of trade of the VR.

Review of the Literature – From a VR Point of View

As VR is not your author’s field, he must be careful in choosing or employing for analysis a book, article, or Chapter in a book that is universally received and recognized by the VR profession. The safe bet is to look at the article by Pomeranz et al. (2010) in the *Journal of Life Care Planners*.

This is a massive piece of research. Running over two years, involving an itemization of 532 potential roles and functions preformed by life care planners, the article begins at page 58 and doesn’t terminate until page 118, sixty pages in all. Your author’s goal is to examine a shorter 122-item list of the role and functions of the life care planner to see which of them involve or lead to a hand-off or in any way overlap with the profession of forensic economics.

The crux of the analysis stems from a survey of 93 participants attending the 2009 International Symposium on Life Care Planning who were asked and answered the specific roles and functions of the life care planner into coreponding themes of validation. The authors state:

Results of this study have important implications for updating life care planning training curricula and certification requirements, as well as for practicing life care planner and other stakeholders.

For puposes of this article, I take “forensic economists” as one of the “other stakeholders.”

In the initial breakdown of the primary clinical fields, it would be difficult to marry any of the 93 participants as being involved in anything as tawdry as litigation. The range of practice fields flows from audiology through case management, medicine and nursing, into physical therapy, rehabilitation counseling and social work. “Life care Planning and legal consulting” comprised only 12.1% of the listed primary clinical fields.

However, in a later statistical table, when we turn to “Current Primary Practice Setting,” results show only 1.3% of the respondents working from an attorney’s office, only 4.0% working from an insurance office, but 32.2% working as an independent practice with employees with a majority of respondents at 48.3% indicating they were a sole proprietor without employees. Your author reckons that the only way 80.5% of the respondents could make a living as a solo practioner with or without employees is to be involved in some manner with preparing life care plans to hand-off to a forensic economists in a litigation setting.

This interpetation is reinforced when a final table from this section shows life care planning activities that are performed remarkably similar to the services

to be provided by a life care plan in a litigation setting. 45.9% of the respondents indicated that they do not perform these activities implying that 54.1% do. Of this 54.1%, you can bet sixty per cent of them are the solo practitioners without employees and the other forty per cent are independent practices with employees. This matches exactly with the assigned proportion as provided in the previous table: $32.2:48.3$ or $32.2 \div 80.5 = 40\%$ and $48.3 \div 80.5 = 60\%$.

Now that we know the volume of VR's working in the litigation field and having contact with FE's through attorney and legal consulting retainers, or 54.1% of the VR community, how does this tie-in with or do anything for the goal of establishing overlap between the FE and the VR?

It answers the question that litigation support is important to the VR community and that over half of this community is involved in someway or other working with or at least providing a life care plan to a FE. The FE's work, of course, is 100% driven by litigation so another Venn Diagram (See Figure 3).

In Appendix B, the life care planning role and function study reduced the list of 122 activities to 21 themes, a number that's probably a better description for our purposes of overlap than the larger one. Of the 21 themes listed, the following 13 themes comprise activities necessary for preparing a life care plan:

Theme 1 – "Consultant Services – Legal System;"
Theme 2 – "Coordination and Service Delivery;"
Theme 3 – "Disability Prevention – Health Promotion;"
Theme 4 – "Equipment Needs/Assistive Technology;"
Theme 5 – "Ethics;"
Theme 6 – "Evidence-based Practice;"
Theme 7 – "Healthcare Management;"
Theme 8 – "Insurance Benefits;"
Theme 9 – Legislation;"
Theme 10 – "Medical and Psychosocial Aspects;"
Theme 11 – "Medical Background;"
Theme 12 – "Program Management and Evaluation;"
*and Theme 13 – "Life Care Planning Needs Assessment."*³

Once again, in Venn Diagram form, the 21 themes of the life care planning role and function study, leads to an overlap of 13 theme-related activities.

Where "A" are factor activities of the FE which we will take as the 8 factors along with economic theory from Brookshire plus "Ethics"⁴ as borrowed from the VR list, "B" are theme activities of VR along with rehabilitation theory which is listed as 21 with "both A & B" being x factors of the 9 factors from FE together with the 13 themes from the 21 themes of the VR community. The presumption is that $x = 2$ or 3 FE factors along with economic theory plus Ethics coinciding with the 13 themes including Ethics of the VR, and this is probably right. The factors of use for the FE are Factor 4 – Earning Growth Rates and Discount Rates, Factor 7 – Medical, Education, Training, and Support Costs, and, in the case of an earnings capacity report,

VENN DIAGRAM!

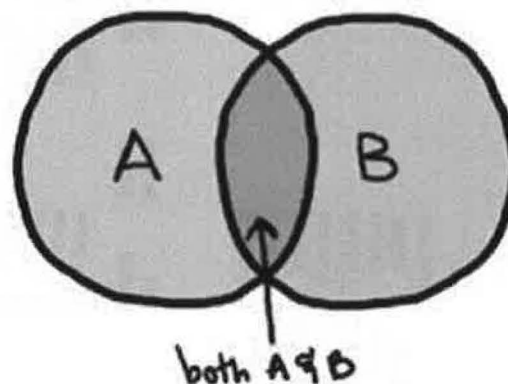


Figure 3. "A" is 100% of the FE community, "B" is 100% of the VR community and "both A & B" comprises 54.1% of the VR community.

Factor 1 – Earnings Level. In the PI table of economic damages below, Factors 4 and 7 relate to the line items for medical costs (1) and the life care plan (2) while the other separate line items relate to earning stream and worklife expectancy (3), and household services (4).

Conclusion

This paper began with a simple Venn Diagram noting FE in one circle to the left and VR in a second circle to the right with the potential for overlap in the center area identified as the life care plan. Through a series of parsing exercises, the Venn Diagram became better articulated including an itemization of the percent of VRs that work in the litigation field, and finally ending with a detailing of 8 factors along with economic theory plus ethics for the FE and 21 themes along with rehabilitation theory and including Ethics for the VR. Of these factors and themes, 2 or 3 factors along with economic theory plus ethics was determined to be in the Venn overlap space accounting for the FE's work in quantifying a life care plan while 13 including ethics were determined as overlap for the VR in preparing a life care plan.

"Both a & b" or the Venn overlap for each discipline is joined as in Table 1 with FE once again to the left and VR to the right.

Dr. Brookshire and Dr. Pomeranz and his co-authors are responsible for the factors and themes used in this paper. Your author is the harvester of their research, and trust some gain has been made in use of their work in propelling a triumvirate understanding of and joint cooperation needed in order for a successful "hand-off" to be made of the life care plan from the VR to the FE to the courts. The work the FE does to arrive

Name of Injured Party							
Economic Damages Table							
Date of Report							
Line		Nominal	Time	Inflation			Trial Date
Item	Category of Damage	Dollars	Rates	in years	Wage Growth Adjustment	Interest	Dollars
1	Medical Costs - 01.01.2012	\$ 500,000	1.50%	3	0.00	\$ 22,955	\$ 522,955
2	Life Care Plan [See LCP Spreadsheet below]	\$ 2,123,376	1.97%	10	0.00	\$ (370,433)	\$ 1,752,943
	Subtotal Medical Costs and Life Care Plan	\$ 2,623,376					\$ 2,275,898
3	Loss of Earnings	\$ 1,000,000	1.97%	10	0.00	\$ (177,235)	\$ 822,765
4	Lost Household Services	\$ 1,203,660	1.97%	10	0.00	\$ (213,331)	\$ 990,329
	Total Economic Damages to Trial Date	\$ 4,827,036					\$ 4,088,992

Name of Injured Party								
Life Care Plan								
Prepared by: Name of VR (Low estimates used throughout)								
Item	Commencing	Longevity	Years	Amount/Year		Total Nominal	Nominal Interest	Trial-Date Present Value
Medications								
Diltropan CR 10mg	Immediately 01.01.2012	daily	10	\$ 1,103.88		\$ 11,039	1.97%	\$ 9,082
Colace 100mg	Immediately 01.01.2012	2X daily	10	\$ 299.88		\$ 2,999	1.97%	\$ 2,467
Senna 8.6mg	Immediately 01.01.2012	2X daily	10	\$ 93.48		\$ 935	1.97%	\$ 769
Dolcolax Suppositories	Immediately 01.01.2012	daily	10	\$ 385.56		\$ 3,856	1.97%	\$ 3,172
SUB-TOTAL						\$ 18,828		\$ 15,490
Disposable Supplies								
Catheter Kits - Closed	Immediately 01.01.2012	6X daily	10	\$ 11,772.00		\$ 117,720	1.97%	\$ 96,855
Diapers	Immediately 01.01.2012	3X daily	10	\$ 810.00		\$ 8,100	1.97%	\$ 6,664
Wipes	Immediately 01.01.2012	4/month	10	\$ 257.76		\$ 2,578	1.97%	\$ 2,121
Gloves	Immediately 01.01.2012	4/month	10	\$ 333.60		\$ 3,336	1.97%	\$ 2,744
SUB-TOTAL						\$ 134,376		\$ 110,557
Durable Medical Equipment								
Manual Wheelchair	Immediately 01.01.2012	2X in 10 yrs	10	\$ 700.00		\$ 7,000	1.97%	\$ 5,759
Power Wheelchair	Immediately 01.01.2012	3.33 in 10 yrs	10	\$ 2,098.00		\$ 20,980	1.97%	\$ 17,261
Wheelchair Cushion	Immediately 01.01.2012	3.33 in 10 yrs	10	\$ 150.00		\$ 1,500	1.97%	\$ 1,234
Invacare Lift	Immediately 01.01.2012	1X in 10 yrs	10	\$ 330.00		\$ 3,300	1.97%	\$ 2,715
Trapeze	Immediately 01.01.2012	1X in 10 yrs	10	\$ 218.90		\$ 2,189	1.97%	\$ 1,808
Shower Chair	Immediately 01.01.2012	3.33 in 10 yrs	10	\$ 463.33		\$ 4,633	1.97%	\$ 3,811
Repatins/Batteries	Immediately 01.01.2012	1X a year	10	\$ 600.00		\$ 6,000	1.97%	\$ 4,936
Hospital Bed	Immediately 01.01.2012	1X in 10 yrs	10	\$ 210.00		\$ 2,100	1.97%	\$ 1,727
SUB-TOTAL						\$ 47,702		\$ 39,251
Assistance at Home								
CAN	Immediately 01.01.2012	24hrs/7days	10	\$ 148,920		\$ 1,489,200	1.97%	\$ 1,225,261
Additional Medical Care								
Rehabilitation, General Medical, Labs, X-rays	Immediately 01.01.2012	routine	10	\$ 1,500.00		\$ 15,000	1.97%	\$ 12,341.00
Therapy	Immediately 01.01.2012	2X weekly	10	\$ 28,400.00		\$ 284,000	1.97%	\$ 233,655
Wheelchair Accessible Van	Immediately 01.01.2012	2X in 10 yrs	10	\$ 9,427.00		\$ 94,270	1.97%	\$ 77,562
2012 Dodge Grand Caravan	Immediately 01.01.2012	1X charge	2	\$ 40,000.00		\$ 40,000	1.50%	\$ 38,826
Wheelchair Accessible Housing	Immediately 01.01.2012	1X charge	2	\$ 40,000.00		\$ 40,000	1.50%	\$ 38,826
Cost of renovation of house	Immediately 01.01.2012	1X charge	2	\$ 40,000.00		\$ 40,000	1.50%	\$ 38,826
TOTAL COST OF LIFE CARE PLAN						\$ 2,123,376		\$ 1,752,943

Table 1

Factor 1 – Earnings Level	Theme 1 – Consultant Service -- Legal System Theme 2 – Coordination and Service Delivery
Factor 4 – Earnings Growth Rates and Discount Rates	Theme 3 – Disability Prevention -- Health Promotion Theme 4 – Equipment Needs/Assistive Technology
Unnamed Factor – Ethics	Theme 5 – Ethics Theme 6 – Evidence-based Practice Theme 7 – Healthcare Management
Factor 6 – Household Services	Theme 8 – Insurance Benefits Theme 9 – Legislation
Factor 7 – Medical, Education, Training and Support Cost	Theme 10 – Medical and Psychosocial Aspects Theme 11 – Medical Background Theme 12 – Program Management and Evaluation Theme 13 – Life Care Planning Needs Assessment
Implied Factor -- Economic Theory	Implied Theme – Rehabilitation Theory

at a dollar sum that will make an injured party financially whole includes 6 factors of the FE discipline. Similarly the non-litigation work performed by a VR accounts for the 8 themes lying outside the overlap area of the Venn Diagram illustrated in this paper. Like the observation made between simile and metaphor, while the litigation of personal injury damages in forensic economics always involves vocational rehabilitation, not all vocational rehabilitation involves litigation. While the FE quantifies a sum of money at a particular moment in time and is then gone, the VR has the more important role of assuring that an injured party carries on past the litigation to live the best possible life that rehabilitation science can give him or her. As to the longevity of our disciplines, the FE is like a comet, it can be useful and dangerous if overlooked in the courtroom, however VR is the very earth and air we walk and breathe. It is with us every day whether in or outside the courtroom.

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Endnotes

- ¹ Francis Ysidro Edgeworth, *Mathematical Psychics: An Essay on the Application of Mathematics to the Moral Sciences*, 1881. Edgeworth's original two-axis depiction was developed into the now familiar box diagram by Vilfredo Pareto in his book: *Manual of Political Economy*, 1906. It was popularized in a later exposition by Sir Arthur L. Bowley, *The Mathematical Groundwork of Economics*, 1924. For a modern use and application of the Edgeworth-Bowley box towards law, see Patrick Bolton and Mathias Dewatripont, *Contract Theory*, 2004.
- ² A recent example is *Douglas Carter v. Countrywide Home Loans, Inc., Federal Home Loan Mortgage Corp (2011)*, Case No. 09A582760, Clark County, Nevada District Court, where, prior to trial, plaintiff attorney, Michael J. Harker, Esq. had requested an economic damage report from your author in the hope the plaintiff, a 72-year old man who had been foreclosed and evicted from his home, would pay a retainer so that the report and its author could be named and summoned for court. Mr. Douglas refused. As such, Judge Bixler, although ruling in favor of the plaintiff on the issue of liability reluctantly awarded the plaintiff \$0 as no economic damages were submitted along with the liability claim. The money Mr. Douglas saved in not hiring an FE occasioned for him a loss of over \$100,000 as quantified in his economic damages re-

port. Surely, this is a case of penny wise and pound foolish.

³ The other 8 themes are: Advocacy, Assess Independent Living Needs, Community Re-entry, Counseling and Services, Outreach and Marketing, Professional Development, Rehabilitation Team, and Vocational Information.

⁴ Ethics belongs to FE just as much as to VR, and it was an oversight for Brookshire to not include it. Both NAFE and AAEFE have preambles that include a statement of ethics for the profession of forensic economics.