



Informatics Initiatives Exceed Value Expectations

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A Sneak Peek at The Value of Precision Medicine Informatics Initiatives Report

Learning from the Trailblazers

Like most industries, healthcare, and particularly precision medicine, can learn a significant amount from early adopters. By placing a rear-facing lens on Precision Medicine Informatics (PMI) initiatives, one can determine their value, and examine the technology, data, and approaches used.

So, What Value Do Precision Medicine Informatics Initiatives Deliver?

In 2019, XIFIN, Inc. and The Journal of Precision Medicine jointly sponsored a global study of PMI initiatives. This study set out to better

understand how precision medicine programs are leveraging the power of data, what types of technologies are being adopted, and the challenges that are being encountered. As part of the research, the concept of “value” derived from PMI initiatives was explored — both in terms of people’s expectations as well as value compared to other technology investments.

For the purposes of the study, PMI or healthcare data management software and applications refer to technologies and approaches that enable the development of real-world healthcare data pools. These technologies facilitate data being queried, analyzed, visualized, and researched, while at

the same time, making the data available to care team members so they can gain deeper insights into optimal disease treatments and improve personalized care decisions.

Methodology and Sample Size

This global study was conducted through an online survey. XIFIN executed a broad digital outreach to precision medicine-related functional roles and organizations that would likely be interested in participating in the research. Subscribers of The Journal of Precision Medicine were invited to participate through the publication website and by email. The research results were based on 120 qualified responses

representing a robust sampling within a narrow but growing precision medicine sub-discipline. The study had global participation, with United States-based respondents representing approximately 60% of the sample.

Defining Value for Informatics Initiatives

The challenge with informatics and technology investments is making a strong business case that is likely to deliver. As the research instrument was developed, there was a debate about how to define “value” for these types of initiatives. Through these discussions, it became clear that defining value as “patient outcomes” or “physician satisfaction” was not enough since the definitions of those could vary widely. Consequently, the survey included a variety of individual metrics that PMI programs may use to measure value. These individual metrics were sorted into five top-level value categories:

- ◆ Patient experience metrics
- ◆ Physician and care team metrics
- ◆ Use and accessibility of real-world data (RWD)
- ◆ Operational and administrative metrics
- ◆ Business and financial metrics

PMI Initiatives Drive Positive Impact on Metrics

Respondents were asked if their PMI initiatives improved certain metrics: to a great extent, to some extent, very little, or not at all. Respondents indicated that PMI initiatives had a positive impact to some or great extent across all five categories (Table 1). The most significant impact is on physician and care team metrics and the use and accessibility of RWD metrics. Frankly, these results were a surprise. It was

Table 1: PMI Initiatives Drive Positive Impact on 5 Sets of Metrics

Metric Category	To a Great Extent	To Some Extent	Very Little	Not at All
Patient experience metrics	23.3%	44.2%	4.7%	7.0%
Physician and care team metrics	32.6%	44.2%	7.0%	0.0%
Use and accessibility of real-world data	34.9%	41.9%	7.0%	2.3%
Operational and administrative metrics	16.3%	39.5%	14.0%	16.3%
Business and financial metrics	14.0%	25.6%	25.6%	11.6%

expected that patient experience metrics would have had the most substantial positive impact. On the opposite side of the spectrum, 37.2% of respondents indicated that PMI initiatives had very little or no positive impact on business or financial metrics. As business cases are developed for PMI technology investments, it is clear that a broad approach to value creation needs to be incorporated.

PMI Value Exceeds Expectations

Research participants were asked about the overall level of value achieved from PMI initiatives as compared to their “going-in” expectations. Approximately 21% of respondents indicated the PMI value exceeded or significantly exceeded expectations (Figure 1). Additional evidence regarding the potential value that PMI can deliver is the result showing more than 50% of respondents indicating the value was close to expectations.

PMI Value Outpaces Other Technology Investments

Informatics initiatives are not funded and prioritized in a vacuum. As such, the study explored the value derived from PMI investments in comparison to other technology

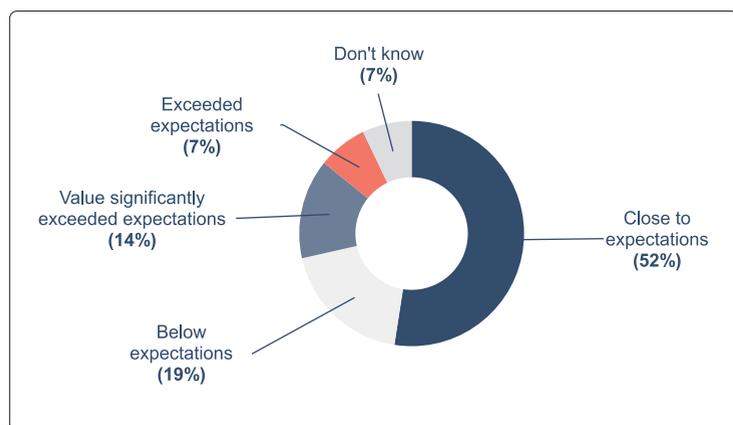
investments that likely compete for funding and prioritization. The research results indicated that almost 30% of respondents reported that their PMI initiative value exceeded or significantly exceeded the value of other technology investments (Figure 2).

Conclusion

Support for the concept of PMI as a discipline is growing. From a technology return on investment perspective, especially within the context of “big data,” the 29% favorable response over other technology investments is telling. These results are just a sneak peek at the full global report now available for download at www.VisualStrata.com.

XIFIN is committed to engaging with the PMI community to gather, synthesize, and determine analytically what types of technologies, data integration, and approaches lead to the highest business value and patient outcomes. As a community, there is an opportunity to share the details of PMI initiatives to determine future best practices so that precision medicine informatics can be truly harnessed for better outcomes. Add your voice and experience to this ongoing study at www.VisualStrata.com/PMISurvey. 

Figure 1: Overall Value of PMI as Compared to Initial Expectations*



*does not add up to 100% due to rounding

Figure 2: Overall Value of PMI as Compared to Other Technologies

