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Patient engagement for Life Sciences R&D
Opportunities and implications

Introduction

The patient engagement ecosystem

Patient engagement, while a common focus for life sciences product marketing, is also growing in importance and influence for life sciences research and development (R&D). With technology as a tool, increasing numbers of consumers (patients) are taking the lead when it comes to managing their individual health care. They are proactively researching conditions and potential treatments online (including a drug's benefits and side effects); conferring with cohorts via social media and online communities; discussing and selecting care regimens with their physician; using new wearable technologies and mobile health (mHealth) applications; and, sometimes, taking the initiative to participate in a clinical trial and/or clinical research study.

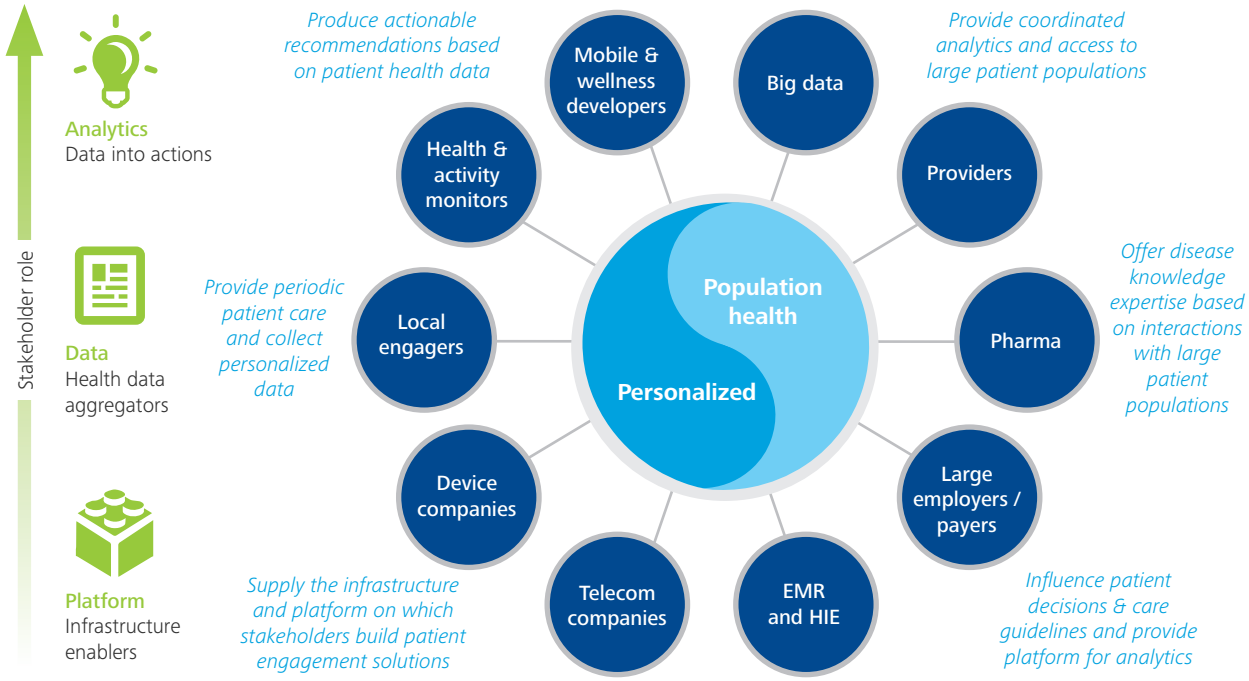
Heightened consumer interest and activism are driving changes along the entire health care continuum, as well as the realization among life sciences companies and other stakeholders in the health care ecosystem that engaging patients in product R&D can help to improve their well-being at both the personal and population health levels (Figure 1).

Deloitte's review of patient engagement activities taking place in the life sciences industry reveals the emergence of four primary trends:

1. Patient Journey Maps
2. Patient Consumerism
3. Patient information Explosion
4. Patient Advocacy Groups

Each of these trends creates both opportunities and implications for life sciences R&D. Further, we have identified a set of enablers — a process[1], solution[2], or both — that can provide an approach for life sciences companies to address each opportunity and implication.

Figure 1
The patient engagement ecosystem



[1] Process — defined as business process and/or operating model
[2] Solution — defined as software application to address specific need

Our take

R&D opportunities based on patient engagement trends

For each of the four patient engagement trends this article highlights a list of opportunities, corresponding implications, and how to enable each opportunity. Companies should consider addressing each of these unique opportunities through creation of either a process and/or solution. Enabling these opportunities drives value for R&D leadership.

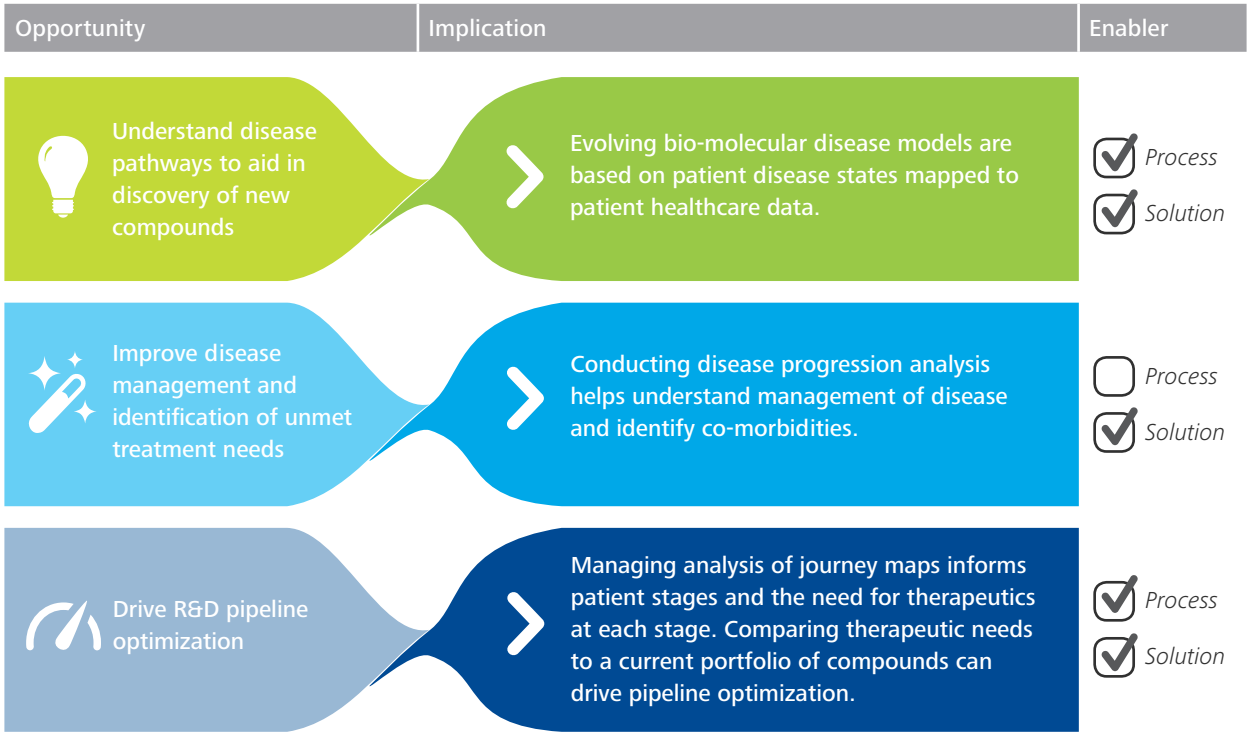
1. Patient journey maps

These maps help provide a comprehensive view of patient engagement for a life sciences company throughout the treatment process and provide insights to the overall product development process. Key R&D marketplace opportunities for this patient engagement trend are:

- Understand disease molecular pathways to aid in discovery of new compounds
- Improve disease management and identification of unmet treatment needs
- Drive R&D pipeline optimization

Figure 2 describes opportunity areas, implications, and enablers.

Figure 2
Patient journey map for R&D



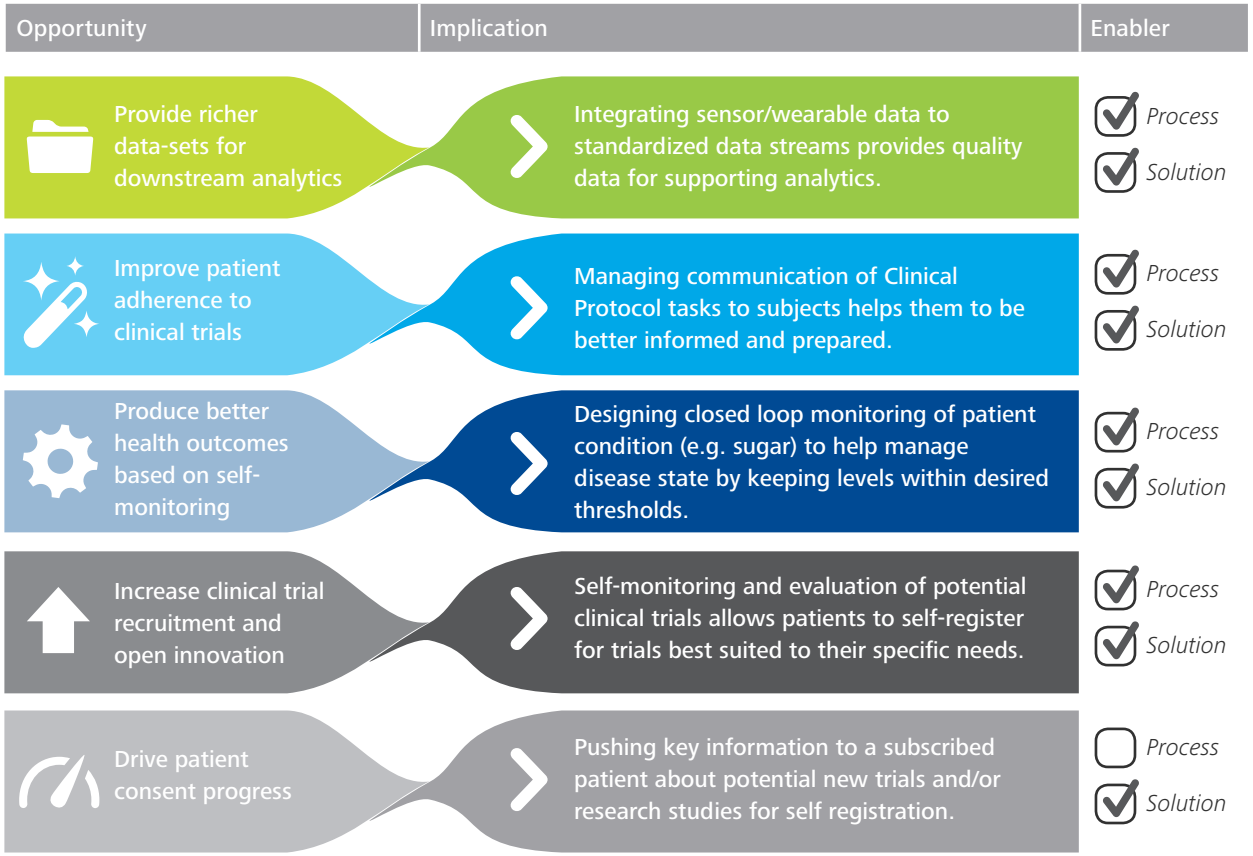
2. Patient consumerism

Insights gleaned from electronic medical records (EMRs), employer-sponsored health and wellness programs, mHealth and other technology advancements are enabling consumers to take more control of their health. Key R&D marketplace opportunities for this patient engagement trend are:

- Provide richer data-sets for downstream analytics
- Improve patient adherence to clinical trials
- Product better health outcomes based on self-monitoring
- Increase clinical trial recruitment and open innovation
- Drive patient consent progress

Figure 3 details opportunity areas, implications, and enablers.

Figure 3
Patient consumerism for R&D



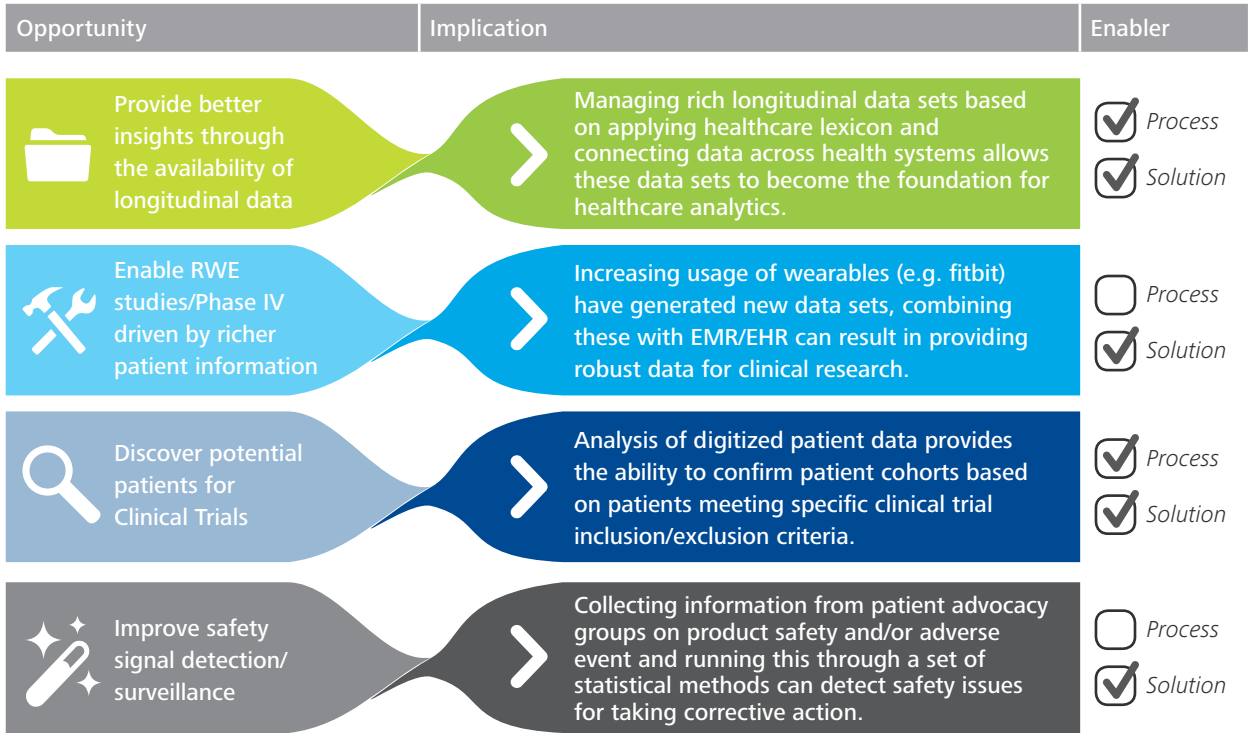
3. Patient information explosion

A rich array of patient medical information (e.g. fitness and wellness data from wearables) is available, creating vast amounts of data, increasing its complexity, and generating valuable insights through the use of analytics. Key R&D marketplace opportunities for this patient engagement trend are:

- Provide better insights through the availability of longitudinal data
- Enable Real World Evidence (RWE) studies/Phase IV trials with richer patient information
- Discover potential patients for clinical trials
- Improve safety signal detection/surveillance

Figure 4 details opportunity areas, implications, and enablers.

Figure 4
Patient information explosion for R&D



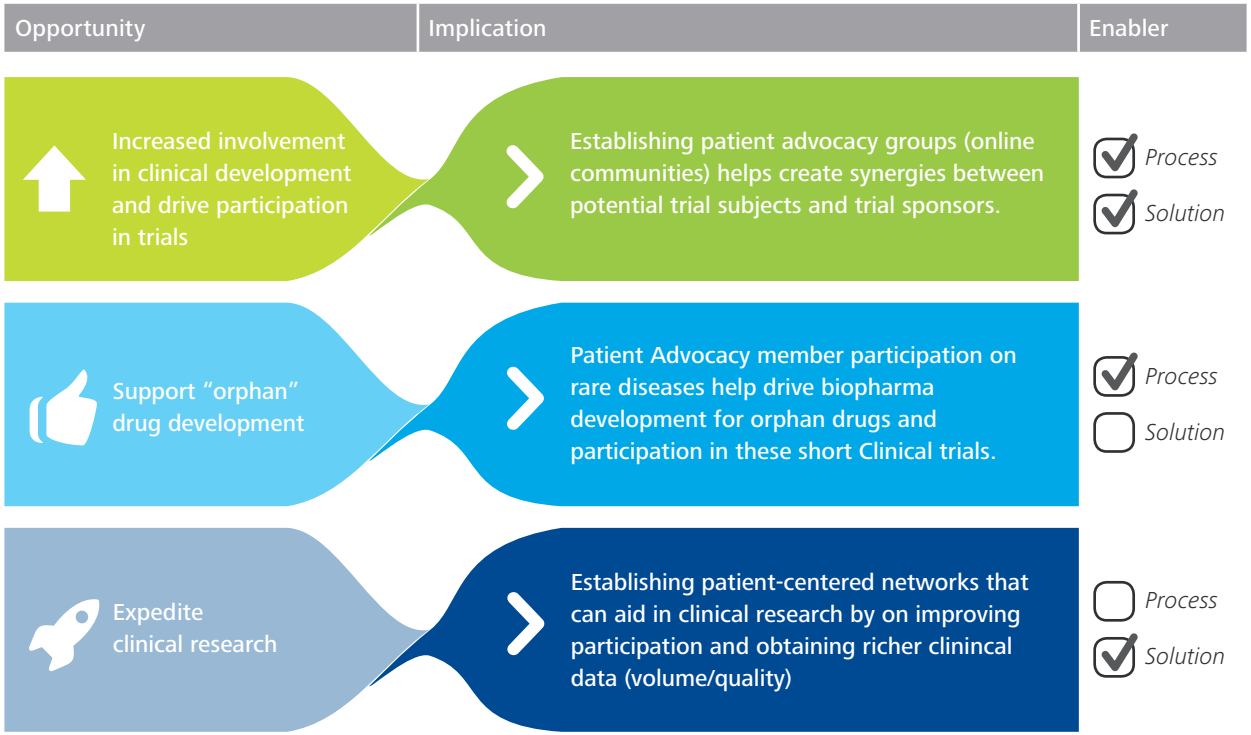
4. Patient advocacy groups

Advocacy groups traditionally have focused on generating patient support and disease state awareness. Today, these groups provide support in a variety of ways; among them, drug research, product development, and increased access. Key R&D marketplace opportunities for this patient engagement trend are:

- Increase involvement in clinical development and drive participation in trials
- Support "orphan" drug development
- Expedite clinical research

Figure 5 details opportunity areas, implications, and enablers.

Figure 5
Patient advocacy groups for R&D



Conclusion

This article explores patient engagement opportunities for life sciences R&D organizations. By leveraging four emerging marketplace developments, organizations can:

- Optimize their R&D pipeline by understanding disease progression via patient journey maps
- Support clinical research by accessing longitudinal health care data
- Strengthen adherence to clinical trial protocol regimens by taking advantage of new technologies (wearables and mobile apps)
- Aid patient cohort identification by accessing rich health care data
- Drive participation and improvement in clinical trial recruitment by providing new avenues for patient advocacy groups to understand clinical trials and clinical research studies

Life sciences organizations that are ready to explore emerging patient engagement opportunities for R&D may find that many can be addressed through process improvements/ modifications and/or point solutions to enable these processes. While some of these solutions already exist, others will need to be modified or developed to meet specific patient engagement implications. In cases where new solutions need to be developed, Platform as a Service (PaaS)-based technologies could be an option in enabling these needed solutions.

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