












EXECUTIVE INSIGHTS

Defining Femtech Consumer Needs and Segmentation in the Women’s Health Landscape

Women’s health is a broad area within healthcare and consumer health, encompassing all health concerns and conditions that affect women and those with a uterus throughout their life. Broadly, women’s health conditions and concerns can be grouped into nine key health needs, mapped across key points in each patient/consumer’s life span (see Figure 1).

Figure 1
Overview of areas of women’s needs

| Women’s need area | Description |
|---|---|
|  Menstrual care | Providing care and relief for menstrual cycles and related conditions |
|  Reproductive health and fertility | Supporting contraception and conception; aiding fertility to improve conception chances |
|  Pregnancy | Supporting pregnancy journeys and pregnancy health outcomes by monitoring and treating complications, and aiding pregnant women |
|  Nursing and postpartum care | Aiding women within the two years following birth, including caring for any new health concerns (e.g., PPD) and helping women care for their new baby |
|  Pelvic and uterine healthcare | Preventing, diagnosing and treating pelvic and uterine cancers and health conditions that can lead to broader concerns/comorbidities such as infertility or cancer |
|  Longevity and health concerns unique for women | Supporting women to live healthy lives considering their specific needs, including health concerns unique/different for women (cardiac, autoimmune, diabetes, etc.) |
|  Sexual health | Providing diagnosis, treatment and management for sexual dysfunctions, STIs/STDs, and other sexual health concerns, such as pain, dryness, discomfort, through adult toys and aids; also includes physical contraception aids (e.g., condoms) |
|  Wellness and mental health | Supporting women’s general wellness and mental health (unrelated to pregnancy) |
|  Menopausal care | Aiding women in menopause to diagnose and relieve symptoms and prevent broader health concerns that may result from hormone changes |

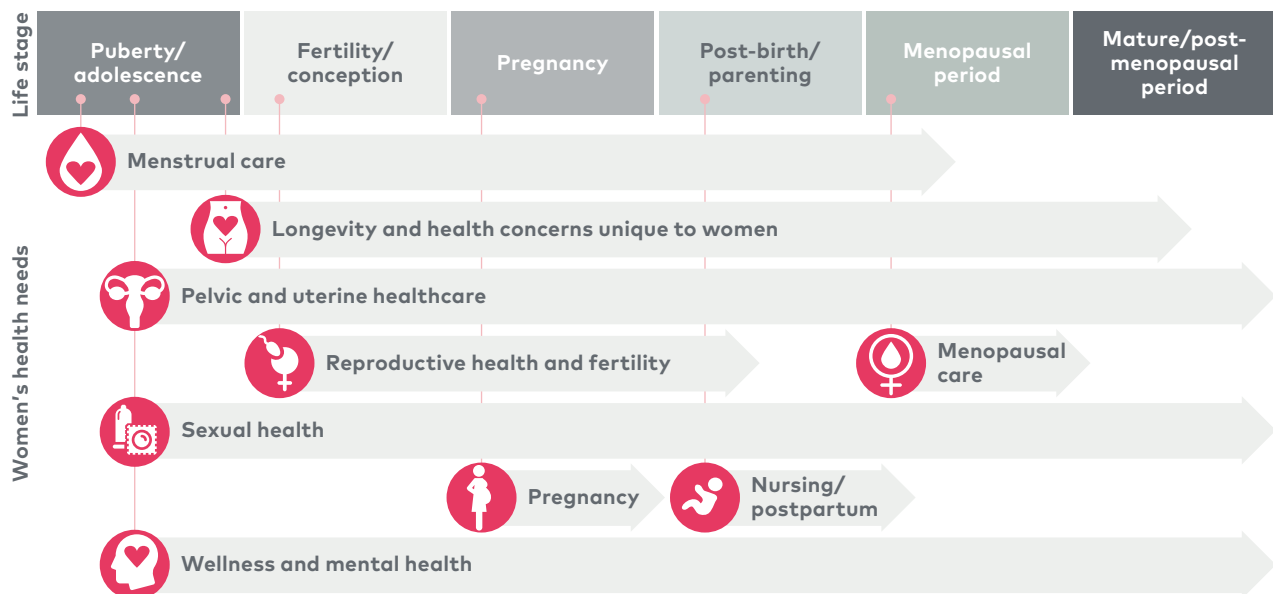
Note: PPD=postpartum depression; STI=sexually transmitted infection; STD=sexually transmitted disease
Source: L.E.K. research and analysis

Across these health needs, the target patient/consumer and unique challenges of treatment and unmet needs of women differ. For example, some of these conditions are female or uterus specific, such as menstrual care, menopausal care and pelvic health (see Figure 2).

Some of these conditions are specific to women but often also involve a partner or child, such as the maternal health and family building (MHFB) segments (defined as reproductive health/fertility, pregnancy, and nursing and postpartum). Some of these conditions affect both genders but have an outsized or differential effect on women; for example, autoimmune disease,¹ severe obesity² and chronic conditions such as migraine³ all disproportionately affect women, while cardiac disease⁴ and sexually transmitted infections⁵ display different indicators among women.⁶

Finally, women's mental health clearly faces unique challenges: Women have higher rates of depression, panic disorders, phobias, post-traumatic stress disorder, obsessive-compulsive disorder, major depression and eating disorders than men, and they are more likely to attempt suicide.⁷

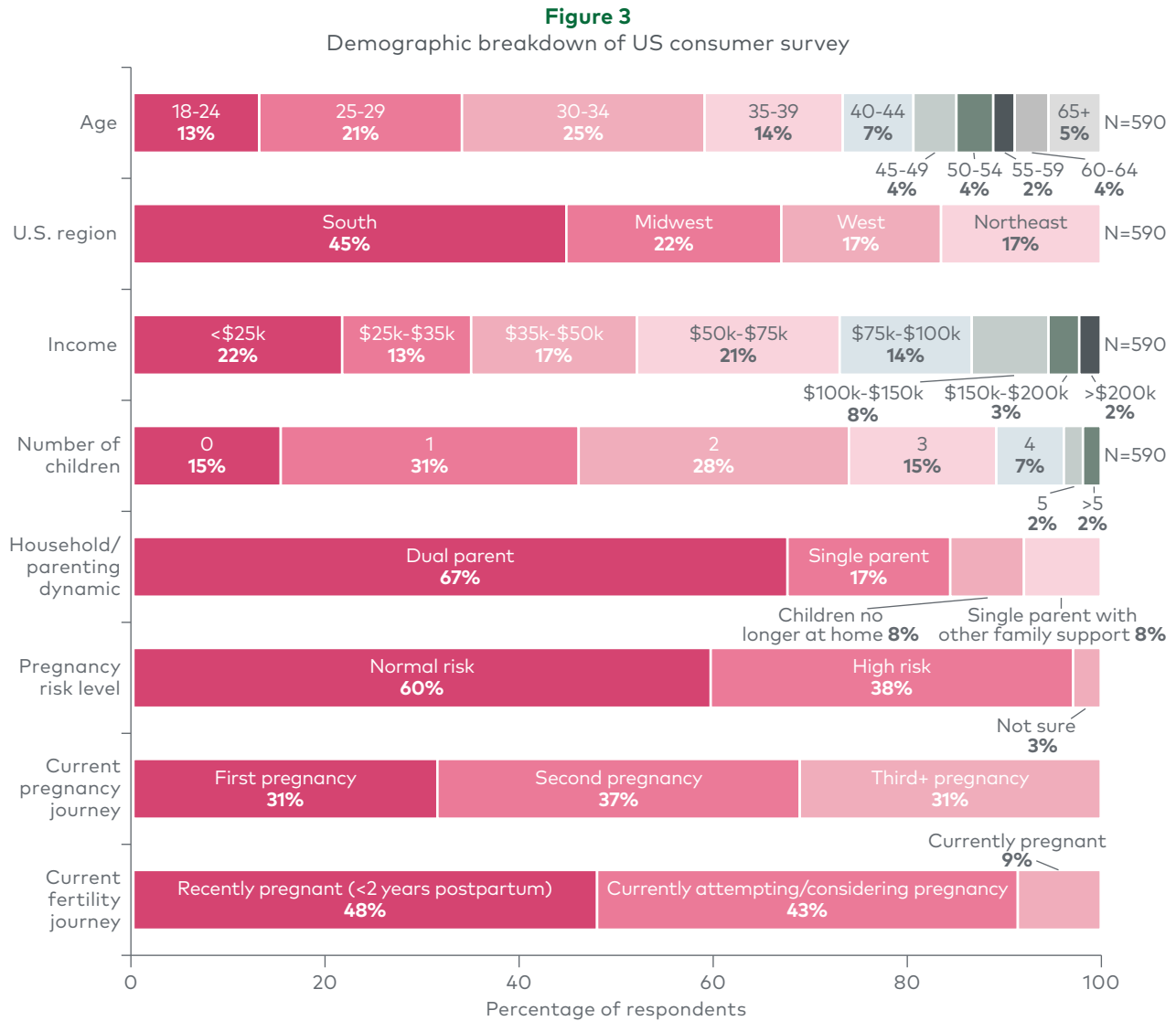
Figure 2
Mapping key women's health segments to life stages



Source: L.E.K. research and analysis

Intense innovation in the women's health and femtech space is quickly moving forward to address these challenges. However, many solutions struggle to, first, truly identify the women's health unmet need and pain point that needs to be solved and, second, to strategically target solutions to customer segments that resonate most with those needs. In order to better localize and understand the extent to which unmet needs exist within the women's health

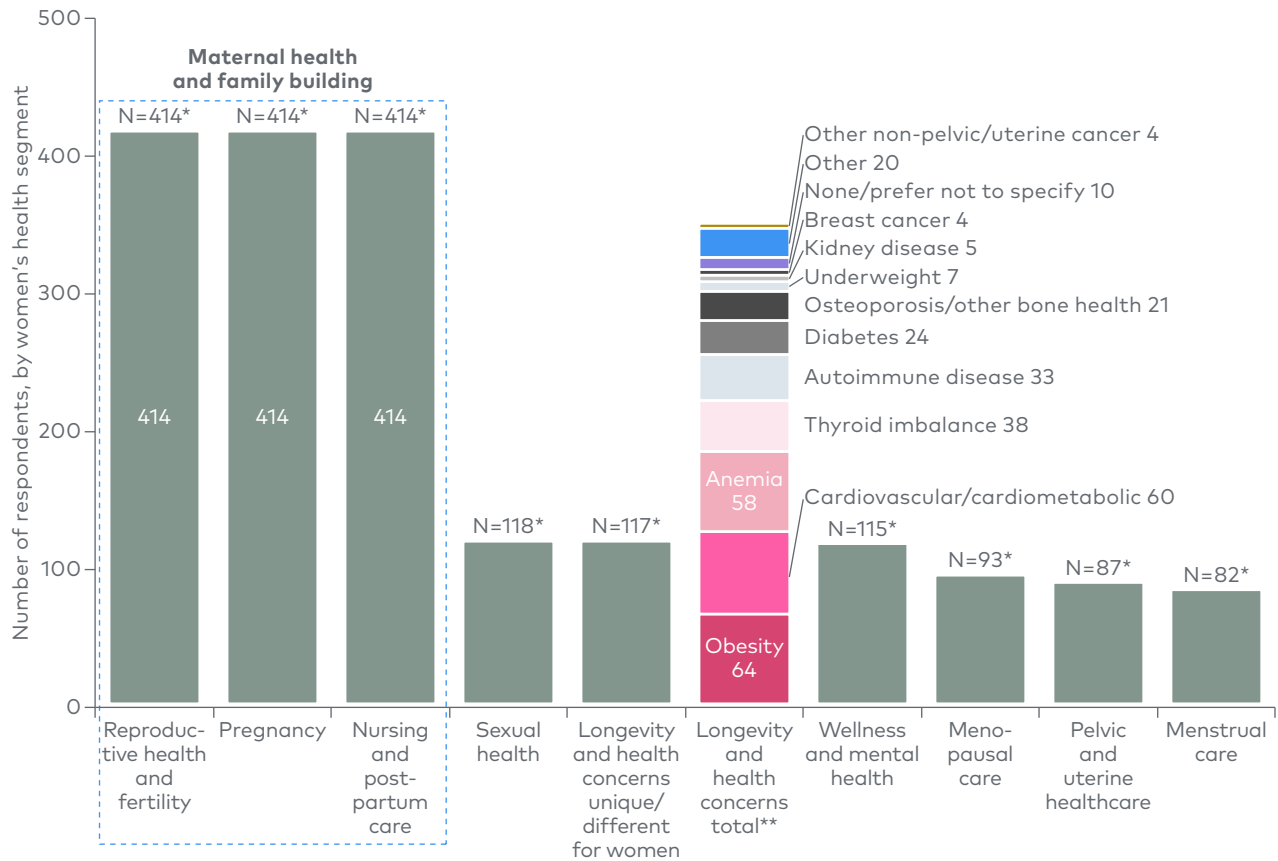
landscape, develop a women's health consumer segmentation scheme, and ultimately drive forward maximum impact in the women's health space, L.E.K. Consulting surveyed a group of 590 U.S. women's health consumers across ages, income brackets, regions and various family groupings (see Figure 3).



Note: Total percentages may not add to 100 due to rounding
Source: L.E.K. survey

About 414 consumers fell into the MHFB segment, while sexual health, longevity and wellness/mental health had over 100 responses. Within longevity, respondents spanned obesity, cardiovascular/cardiometabolic conditions, anemia, thyroid conditions and autoimmune disorders/diabetes, among other chronic conditions (see Figure 4).

Figure 4
Women's health segment breakdown of US customer survey



*Survey questions: Which of the following best describes your current reproductive stage? Q9. Are you currently pregnant, recently pregnant or considering pregnancy? Q10. Are you currently considering or attempting pregnancy? Q13. Do you currently have any of the following conditions? Please select all answers that apply

**A total of 117 respondents indicated longevity and health concerns; conditions are not mutually exclusive

Source: L.E.K. survey, research and analysis

Beyond the obvious: What is an unmet need?

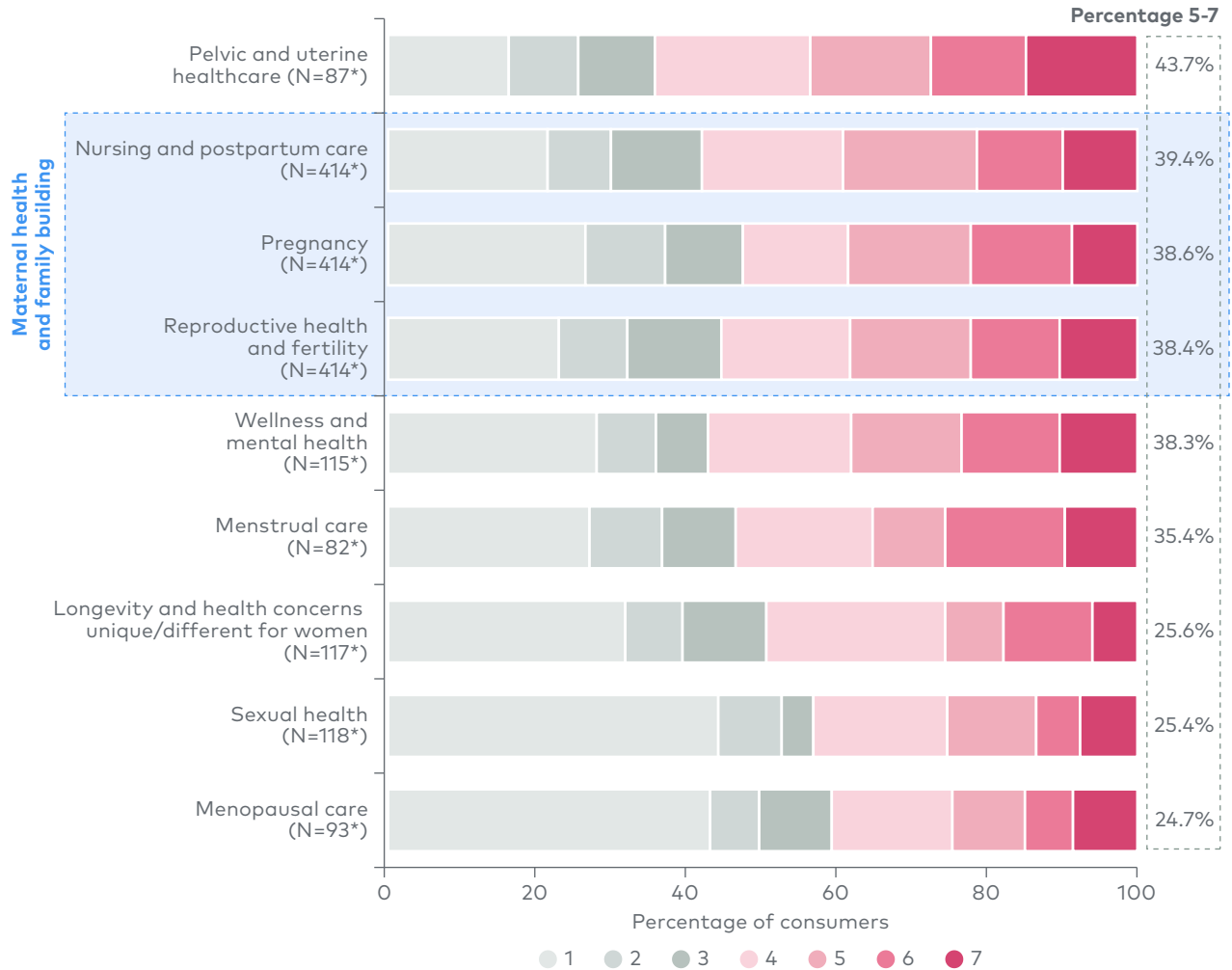
We asked consumers to think of unmet needs broadly as areas for which they perceived no solution to exist, either due to lack of access or lack of commercially available options. We explained to consumers that unmet needs are not necessarily needs consumers felt they would pay more to address, to ensure that the highlighted needs best represent market gaps vs. solely incremental value capture opportunities.

Clinical conundrums: Unmet needs across women's health clinical segments and solution types

By women's health condition/concern area, consumers indicate that the highest unmet need exists within pelvic and uterine care (including issues such as uterine, cervical and ovarian

cancers; pelvic inflammatory disease; endometriosis; and polycystic ovary syndrome) and MHFB areas, closely followed by wellness and mental health (see Figure 5).

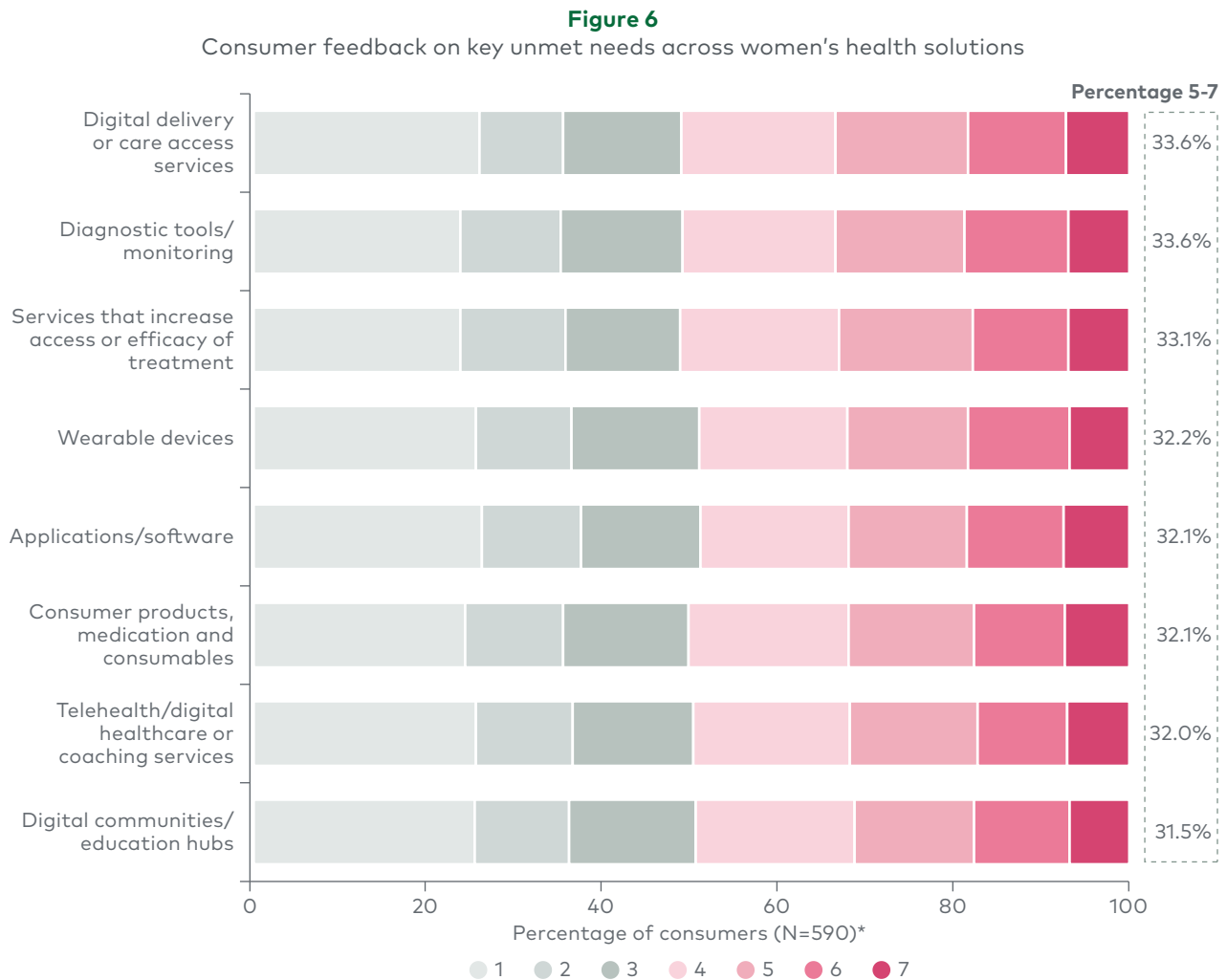
Figure 5
Consumer feedback on key unmet needs across women's health segments



*Survey question: Q17. What is your overall level of unmet need as it relates to the current management of women's health issues in each women's health segment?
Source: L.E.K. survey, research and analysis

By solution type, consumers indicate the highest unmet need is for solutions that drive broader access to care, increase consumer knowledge about their health status and increase treatment efficacy, such as digital care delivery solutions and diagnostic tools/monitoring devices (see Figure 6).

Overall, approximately one-third to just under one-half of women's health consumers state that they have a highly unmet need within a specific clinical area or for specific solution types, indicating high existing unmet needs within this core consumer group.



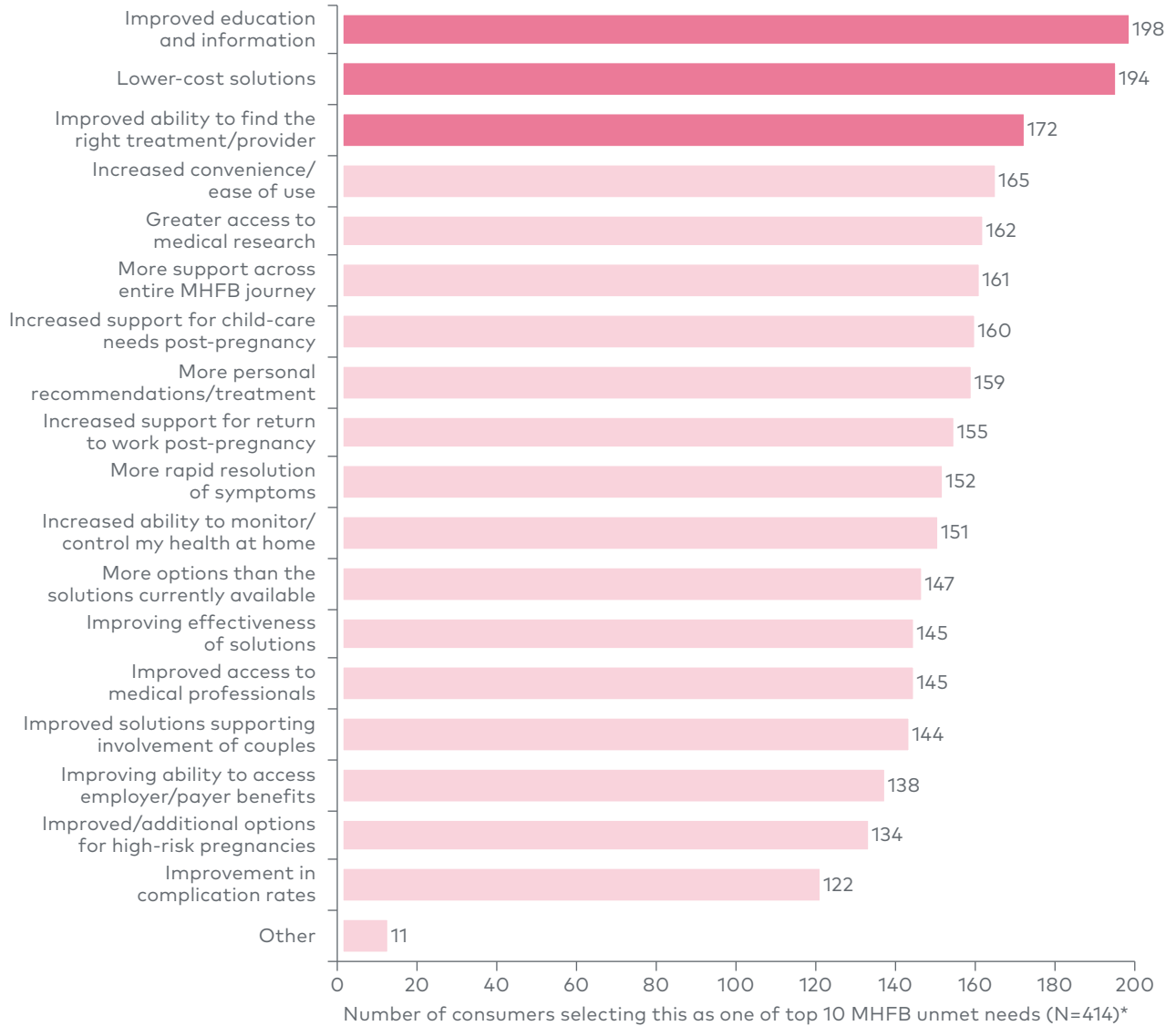
*Survey question: Q18. What is your overall level of unmet need within each women's health segment in each women's health solution category?
Source: L.E.K. survey, research and analysis

Maternal and contraception mysteries: Unraveling unmet needs in maternal health and family building

Although the area is relatively more mature in terms of investment,⁸ high unmet need still exists for MHFB consumers. These consumers indicated that improvement in consumer education and care access — through lower-cost solutions and improved ability to find the right treatment or provider for a consumer's unique question, condition or symptom — is the most important area where needs are not currently met (see Figure 7).

Figure 7

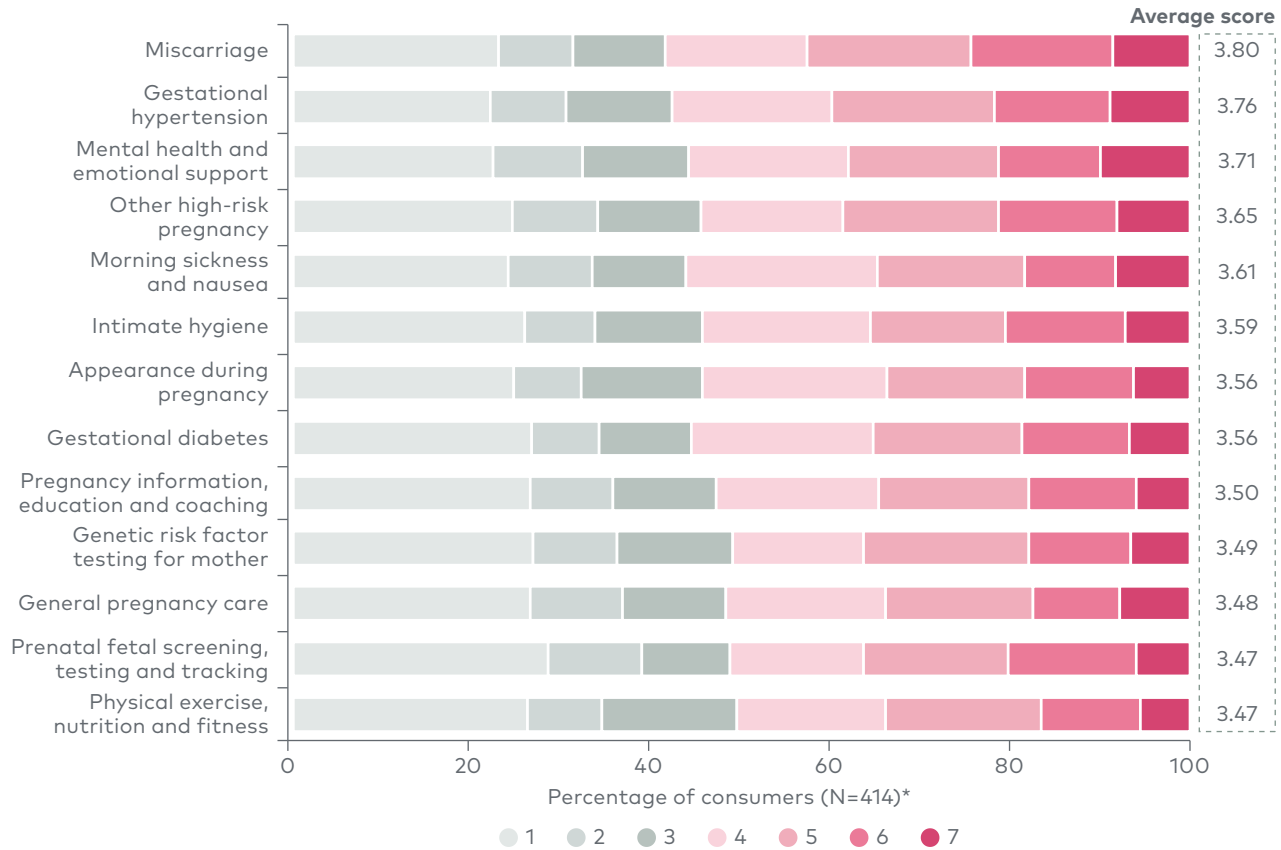
Consumer feedback on key unmet needs within MHFB



*Survey question: Q22. Which of the needs specified below are the most significant unmet needs, around managing your maternal health and family building needs? (select up to 10)
 Note: MHFB=maternal health and family building
 Source: L.E.K. survey

Unmet needs vary by each MHFB segment, dependent upon specific pain points each consumer faces within specific stages of the maternal health and family building journey. Unmet need is highest on average within nursing and postpartum care, specifically for solutions that support the new parent in their self-care or mental health (see Figure 8).

Figure 8
Consumer feedback on key unmet needs within pregnancy

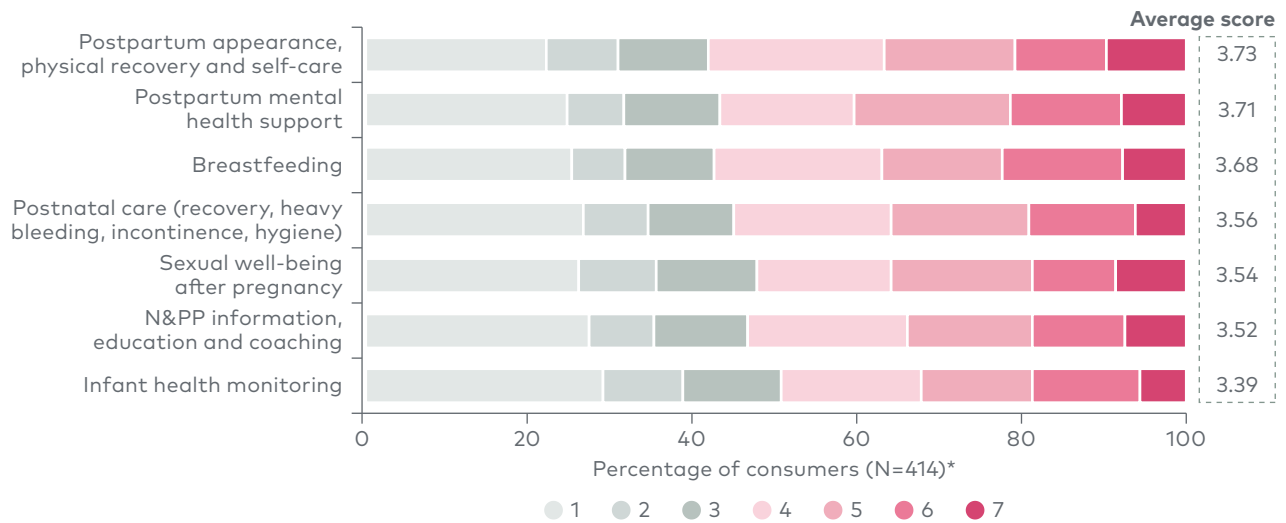


*Survey question: Q21. What is your overall level of unmet need as it relates to the current management of maternal health and family building issues in each of the maternal health and family building subsegments specified below? Please indicate your response on a scale of 1 to 7, where '1' means 'no unmet need' and '7' means 'significant unmet need'
Source: L.E.K. survey

Within pregnancy, consumers indicate having a need for support for traditionally stigmatized conditions such as miscarriage and for high-risk pregnancy support surrounding symptoms such as gestational hypertension and mental health (see Figure 9).

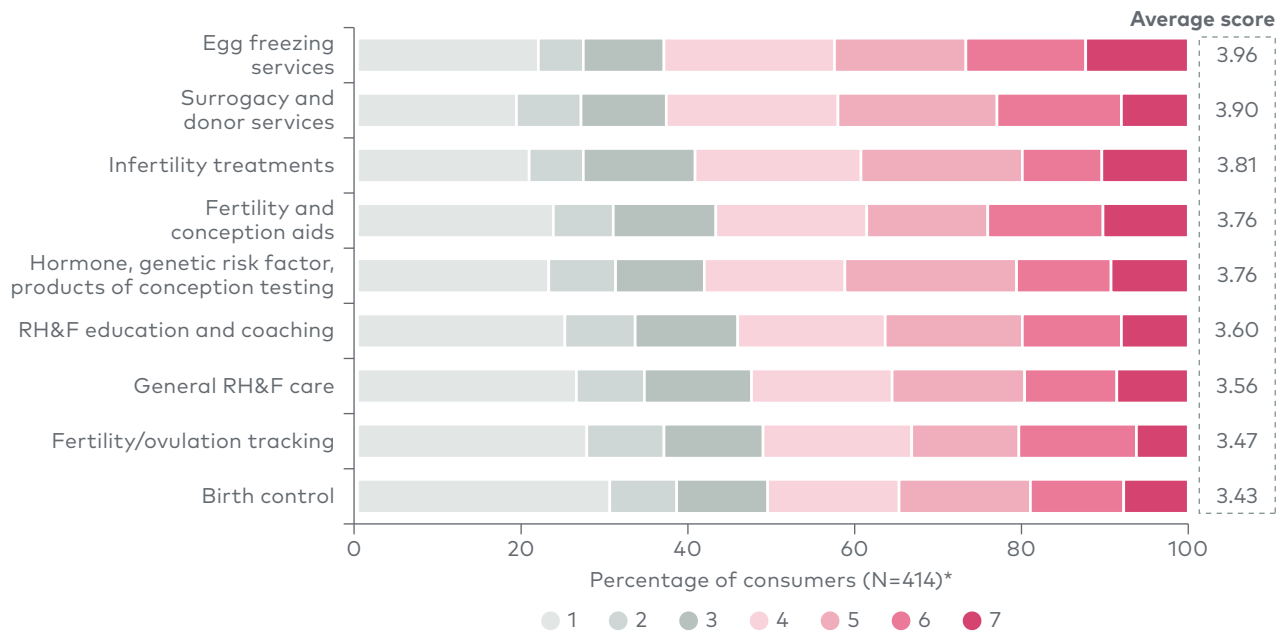
Finally, within reproductive health and fertility, consumers indicate the highest unmet needs for access to specific services that are becoming increasingly common as the age at which women give birth to their first child continues to increase,⁹ such as egg freezing, surrogacy and donor services, and infertility treatments. Fertility conception aids and diagnostic testing for genetic risk factors and fertility hormones also rate as unmet needs for MHFB consumers (see Figure 10).

Figure 9
Consumer feedback on key unmet needs within N&PP and MHFB



*Survey questions: Q21. What is your overall level of unmet need as it relates to the current management of maternal health and family building issues in each of the maternal health and family building subsegments specified below? Please indicate your response on a scale of 1 to 7, where '1' means 'no unmet need' and '7' means 'significant unmet need.' Q22. Which of the needs specified below are the most significant unmet needs, around managing your maternal health and family building needs? (select up to 10)
 Note: N&PP=nursing and postpartum; MHFB=maternal health and family building
 Source: L.E.K. survey

Figure 10
Consumer feedback on key unmet needs within RH&F and MHFB



*Survey questions: Q21. What is your overall level of unmet need as it relates to the current management of maternal health and family building issues in each of the maternal health and family building subsegments specified below? Please indicate your response on a scale of 1 to 7, where '1' means 'no unmet need' and '7' means 'significant unmet need.' Q22. Which of the needs specified below are the most significant unmet needs, around managing your maternal health and family building needs? (select up to 10)
 Note: RH&F=reproductive health and fertility; MHFB=maternal health and family building
 Source: L.E.K. survey












The maternal and reproductive health spectrum: Segmenting consumers for tailored solution development

To better understand MHFB consumers and to tactically guide marketing within the femtech space, we next undertook statistical cluster analysis¹⁰ to group women's health consumers into personas by key behavioral and demographic criteria (see Figure 11), including:

- **Current life stage:** Segmenting consumers by currently pregnant, considering or attempting pregnancy, or less than two years postpartum
- **Experience of mental health or general health conditions:** Experience of conditions such as postpartum depression, other mental health conditions, high-risk pregnancy, infertility or specific chronic conditions
- **Self-reported mental state:** Self-reported state of emotional, psychological or social well-being when taking the survey and degree to which respondents self-reportedly struggle with their mental state

Figure 11

Grouping consumers into personas, by key behavioral and demographic criteria*

| Segment** | Definition | Total N |
|--|--|---------|
|  Pregnancy | Currently pregnant | N=48 |
|  Fertility | Considering or attempting pregnancy | N=238 |
|  Postpartum | Less than two years postpartum | N=263 |
|  High-risk pregnancy | Physician-diagnosed risk of complications, preterm delivery, and health problems for mother or baby | N=205 |
|  Experiencing pregnancy-related mental health conditions | Postpartum depression or other mental health conditions related to pregnancy/postpartum | N=99 |
|  Fertility concerns | Infertility or difficulty conceiving | N=67 |
|  General health conditions | General physical health conditions (e.g., autoimmune, diabetes, breast cancer, obesity, etc.) | N=190 |
|  Cardio condition | Cardiovascular or cardiometabolic condition (e.g., heart disease, heart failure, hypertension, etc.) | N=60 |
|  General mental health condition | Diagnosed with general non-postpartum depression, anxiety or other mental health conditions | N=203 |
|  Mental state – poor | Poor state of emotional, psychological or social well-being | N=29 |
|  Mental state – bothered always or often | Always or often struggles with emotional, psychological or social well-being | N=160 |

*Survey questions: Q8. Which of the following best describes your current reproductive stage? Q9. Are you currently pregnant, recently pregnant or considering pregnancy? Q10. Are you currently considering or attempting pregnancy? Q13. Do you currently have any of the following conditions? Please select all answers that apply

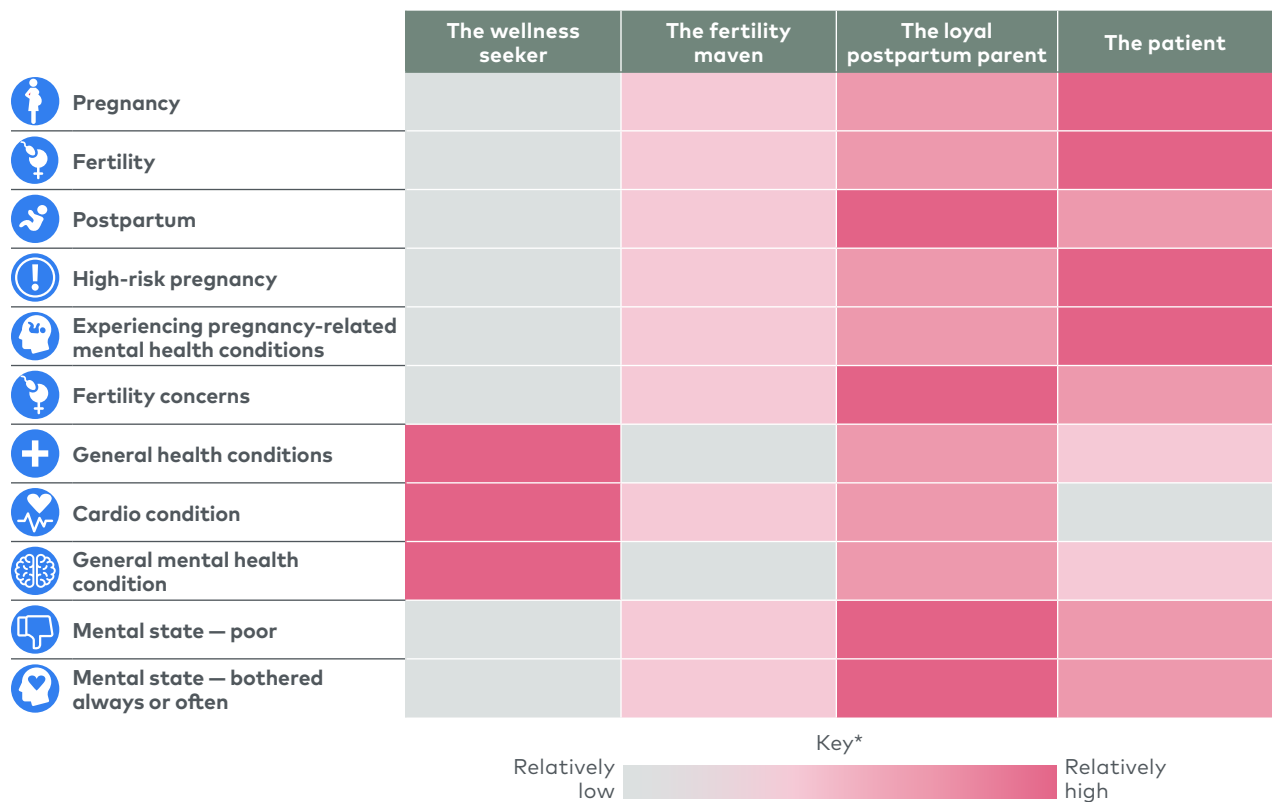
**Not mutually exclusive

Source: L.E.K. survey, research and analysis

This technique yielded four key personas of women's health consumers with unique behavioral and demographic profiles (see Figure 12), detailed below:

- **The wellness seeker:** Consumer who has a distinct need for wellness and mental health solutions, with high resonance in the need for specific solution types
- **The fertility maven:** Consumer who is considering conceiving and currently evaluating a variety of products to use across the MHFB journey, with a specific need for low-cost fertility solutions
- **The loyal postpartum parent:** Consumer who is most likely postpartum with specific needs for postpartum mental health and personal support
- **The patient:** Consumer who is facing or undergoing a high-risk pregnancy (including likely experience of pregnancy-related mental health concerns) with the greatest need across all segments of women's health

Figure 12
Top 4 key personas of women's health consumers



*Shading determined by cluster value relative to other cluster values
 Source: L.E.K. survey and analysis

Each women's health persona experiences a unique set of unmet needs, based on their specific life experience and perceptions, and resonates with and attaches to solutions differently. Attachment here refers to the likelihood to reutilize preferred solution brands that they have utilized in the past and can be directly mapped to customer lifetime value (see Figure 13).

The wellness seeker: Requires specific solution types to meet wellness and mental health needs, with type depending on individual needs of each consumer. Wellness seekers also have higher unmet needs across various non-MHFB healthcare clinical areas, including pelvic/uterine health, sexual health and menopausal conditions. These consumers typically have the lowest attachment to solution brands — they are the most fickle and have a desire to try new brands even if they are highly satisfied with solutions they've used in the past.






The fertility maven: Requires solutions for current and future life stages including birth control, low-cost fertility solutions, and nursing and postpartum solutions, but is flexible across solution types to meet these needs. These consumers have higher brand loyalty and attachment than wellness seekers.

The loyal postpartum parent: Requires solutions specifically for mental health/emotional support in the pregnancy and postpartum periods, as well as solutions across postpartum and nursing. These consumers are likely to be the most bothered by their mental state/ have the poorest mental state, and as a result are fairly loyal to solution brands that have met their needs in the past. This correlation between mental state and solution attachment is hypothesized by the maternal health psychiatrists we spoke with to be due to human psychology; in times of hardship, consumers typically latch on to stability — in this case, solutions that have helped them.

The patient: Requires solutions to meet needs for a high-risk pregnancy, with additional high unmet needs across all segments of women's health. These consumers are discerning in their solution preferences and are the most likely to reutilize brands they are satisfied with, implying the highest potential for customer lifetime value opportunity.

Figure 13

Likelihood of top 4 personas to reutilize preferred solution brands that they have utilized in the past

| | Key characteristics | Cluster group | | | |
|-----------------------|--|---|---|--|--|
| | | The wellness seeker | The fertility maven | The loyal postpartum parent | The patient |
| Health status |  Maternal/fertility status | <ul style="list-style-type: none"> Not pregnant, postpartum or considering conceiving/trying to conceive | <ul style="list-style-type: none"> Considering conceiving | <ul style="list-style-type: none"> Considering conceiving or trying to conceive or postpartum (more likely postpartum) | <ul style="list-style-type: none"> Considering conceiving or trying to conceive or postpartum (more likely trying to conceive/considering conceiving) More likely to be pregnant |
| |  Mental/general health status | <ul style="list-style-type: none"> Unlikely to have a high-risk pregnancy or pregnancy-related mental health concerns More likely to have general health conditions, including cardio and mental health | <ul style="list-style-type: none"> Less likely to experience general health or mental health concerns | <ul style="list-style-type: none"> More likely to experience pregnancy-related mental health concerns Most likely to be bothered/have the poorest mental state | <ul style="list-style-type: none"> Most likely to have a high-risk pregnancy and experience pregnancy-related mental health concerns |
| Solution perspectives |  Resonance with solution types (e.g., diagnostic tools, apps, wearables) | <ul style="list-style-type: none"> Resonate highly with solution types | <ul style="list-style-type: none"> Resonate least with solution types | <ul style="list-style-type: none"> Resonate moderately with solution types | <ul style="list-style-type: none"> Resonate most with solution types |
| |  Attachment across maternal health and family building solutions | <ul style="list-style-type: none"> Low attachment | <ul style="list-style-type: none"> Moderate attachment | <ul style="list-style-type: none"> Fair attachment | <ul style="list-style-type: none"> High attachment |
| |  Key unmet needs | <ul style="list-style-type: none"> Wellness and mental health are the most significant unmet need Higher unmet need for pelvic, uterine, sexual health, wellness, mental health and menopausal compared with other clusters | <ul style="list-style-type: none"> Highest unmet need for birth control solutions, nursing and postpartum solutions More likely to rank lower-cost fertility solutions as a top three need compared with other clusters | <ul style="list-style-type: none"> Highest unmet need for mental health/emotional support during pregnancy and postpartum, birth control and breastfeeding Highest unmet need in nursing and postpartum compared with other clusters | <ul style="list-style-type: none"> Greatest unmet need in reproductive health Highest need across all segments of women's health relative to other clusters |

Source: L.E.K. survey, research and analysis

From gaps to solutions: Key tenets to guide innovative solution design and targeting in women's health

Unmet need levels in women's health imply a significant need for innovation. Although women's health conditions typically have a higher burden-to-funding ratio compared with conditions that disproportionately affect men, women's health unmet needs — felt by around 35%-45% of the addressable population, based on our work — compare with analogs in other gender-specific areas of healthcare, such as prostate cancer¹¹ and erectile dysfunction¹²

(reported at about 42%-48%). Therefore, although levels of unmet need are commensurate with male-specific conditions, women's health is not getting its fair share of funding. To drive impact in the evolving femtech and women's health space, innovators should focus on developing solutions and investing in spaces that deeply address consumers' unmet needs and consider the following calls to action:

- **Target solutions to the appropriate customer persona to maximize uptake**

Each consumer persona implies a unique set of clinical and solution-specific needs within MHFB. As the femtech space continues to evolve, it will become increasingly important for solutions to differentiate themselves with a clear value proposition and clear customer targeting strategy. Companies offering specialized or individualized care or solutions, such as Plume (transgender care), Oula (maternity care) and Adyn (personalized contraception), have delivered on their targeting and value proposition strategies toward specific consumer groups.

- **Meet consumers where they are in their need and psychological profiles – empathy goes a long way**

For example, the loyal postpartum parent is the most likely to have the poorest mental state and to need a sense of trust with brands they utilize. Solutions can utilize empathetic techniques in messaging and solution design to become a trusted partner to consumers and drive eventual repeat use of brands. This principle is brought to life in solutions redesigning traditionally painful procedures, such as intrauterine device insertion.

- **Draw connections between groups of unmet needs based on consumer behaviors and personas to maximize impact within a care episode**

Although unmet needs are often specific to a single clinical area or condition, solutions can be considered "end to end" across a variety of unmet needs in a care episode. For example, Clue offers consumers menstrual cycle tracking, fertility window tracking and fertility-specific consumer educational content on a single platform. Similarly, Betty's Co. offers gynecological and wellness care as well as consumer sexual health products on its ecommerce platform.

- **Target innovation in one area to prime end-to-end platform growth adjacencies within associated clinical areas, given customer overlap across segments**

For example, there is significant overlap between managing pelvic/uterine health conditions and falling within the MHFB segments (clinical research reports up to 45%-55% of pregnant and postpartum women experience a pelvic floor disorder).¹³ A brand like Elvie showcases this well with its dual postpartum and pelvic floor therapy offering.

Decoding women's health consumers is complex, and involves examination of the behaviors, preferences and lens through which women and those with a uterus view their care and solution choices. Ultimately, all it takes to decode a women's health consumer is offering a solution that incorporates that person's voice into the design and care delivery process.

For more information, please contact medtech@lekinsights.com.

Endnotes

¹Nature.com, "Why autoimmunity is most common in women." <https://www.nature.com/articles/d41586-021-01836-9>

²Cdc.gov, "Prevalence of Obesity and Severe Obesity Among Adults: United States, 2017–2018." <https://www.cdc.gov/nchs/products/databriefs/db360.htm>

³Migrainebuddy.com, "Understanding Migraines: The Gender Divide." <https://migrainebuddy.com/understanding-migraines-the-gender-divide/>

⁴Heart.org, "Women vs. Men Heart Attack Symptoms." <https://www.heart.org/en/health-topics/house-calls/women-vs-men-heart-attack-symptoms>

⁵CDC.gov, "10 Ways STDs Impact Women Differently from Men." <https://www.cdc.gov/std/health-disparities/stds-women-042011.pdf>

⁶Psychiatry.org, "Mental Health Disparities: Women's Mental Health." <https://www.psychiatry.org/File%20Library/Psychiatrists/Cultural-Competency/Mental-Health-Disparities/Mental-Health-Facts-for-Women.pdf>

⁷SVB.com, "Innovation in WOMen's Health 2023." <https://www.svb.com/globalassets/trendsandinsights/reports/svb-innovation-in-womens-health-report-20232.pdf>

⁸Census.gov, "Fertility Rates: Declined for Younger Women, Increased for Older Women." https://www.census.gov/library/stories/2022/04/fertility-rates-declined-for-younger-women-increased-for-older-women.html?utm_campaign=20220406msacos1ccstors&utm_medium=email&utm_source=govdelivery

⁹Census.gov, "Fertility Rates: Declined for Younger Women, Increased for Older Women." https://www.census.gov/library/stories/2022/04/fertility-rates-declined-for-younger-women-increased-for-older-women.html?utm_campaign=20220406msacos1ccstors&utm_medium=email&utm_source=govdelivery

¹⁰SVB.com, "Innovation in WOMen's Health 2023."

¹¹Gogale.com, "Identifying unmet care needs of patients with prostate cancer to assist with their success in coping." <https://go.gale.com/ps/i.do?id=GALE%7CA469502638&sid=googleScholar&v=2.1&it=r&linkaccess=abs&issn=1053816X&p=AONE&sw=w&userGroupName=anon%7Ef49532a2>

¹²Sciencedirect.com, "Health-Related Characteristics and Unmet Needs of Men with Erectile Dysfunction: A Survey in Five European Countries." <https://www.sciencedirect.com/science/article/abs/pii/S1743609515305233>

¹³OBGYNOnlineLibrary.com, "Prevalence and severity of pelvic floor disorders in pregnant and postpartum women." <https://obgyn.onlinelibrary.wiley.com/doi/10.1002/ijgo.14019>

About the Authors



Sheila Shah

Sheila Shah is a Managing Director and Partner in L.E.K. Consulting's Chicago office and serves as leader of the firm's Digital Healthcare practice. Sheila's experience covers a range of projects, with a particular focus on healthcare technology, due diligence, commercial strategy, healthcare supply chain, growth opportunity assessment and organizational design.



Candace Nagaraja

Candace Nagaraja is a Senior Engagement Manager in L.E.K. Consulting's Atlanta office and serves as the U.S. Women's Health Lead. Candace heads the firm's development of the women's health vertical and specializes in marketing/commercial strategy across healthcare and women's health. She also sits on the board of HerHealthEQ, an organization coordinating the supply of women's health equipment to underserved geographies globally, serves as a mentor at Femtech Lab and sits on the Springboard Women's Health Council.



Kennedy Quist

Kennedy Quist is a Senior Associate Consultant in L.E.K. Consulting's Chicago office and a member of the firm's MedTech practice. Kennedy specializes in marketing/commercial strategy and due diligence projects across an array of healthcare market segments. Outside of casework, she supports development of both the Women's Health and Digital Health service lines, and is a member of Inspire, a nonprofit consulting service dedicated to social impact.

About L.E.K. Consulting

We're L.E.K. Consulting, a global strategy consultancy working with business leaders to seize competitive advantage and amplify growth. Our insights are catalysts that reshape the trajectory of our clients' businesses, uncovering opportunities and empowering them to master their moments of truth. Since 1983, our worldwide practice — spanning the Americas, Asia-Pacific and Europe — has guided leaders across all industries from global corporations to emerging entrepreneurial businesses and private equity investors. Looking for more? Visit www.lek.com.

L.E.K. Consulting is a registered trademark of L.E.K. Consulting LLC. All other products and brands mentioned in this document are properties of their respective owners. © 2023 L.E.K. Consulting LLC