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FAMILIES THRIVE WITH GOOD MENTAL HEALTH

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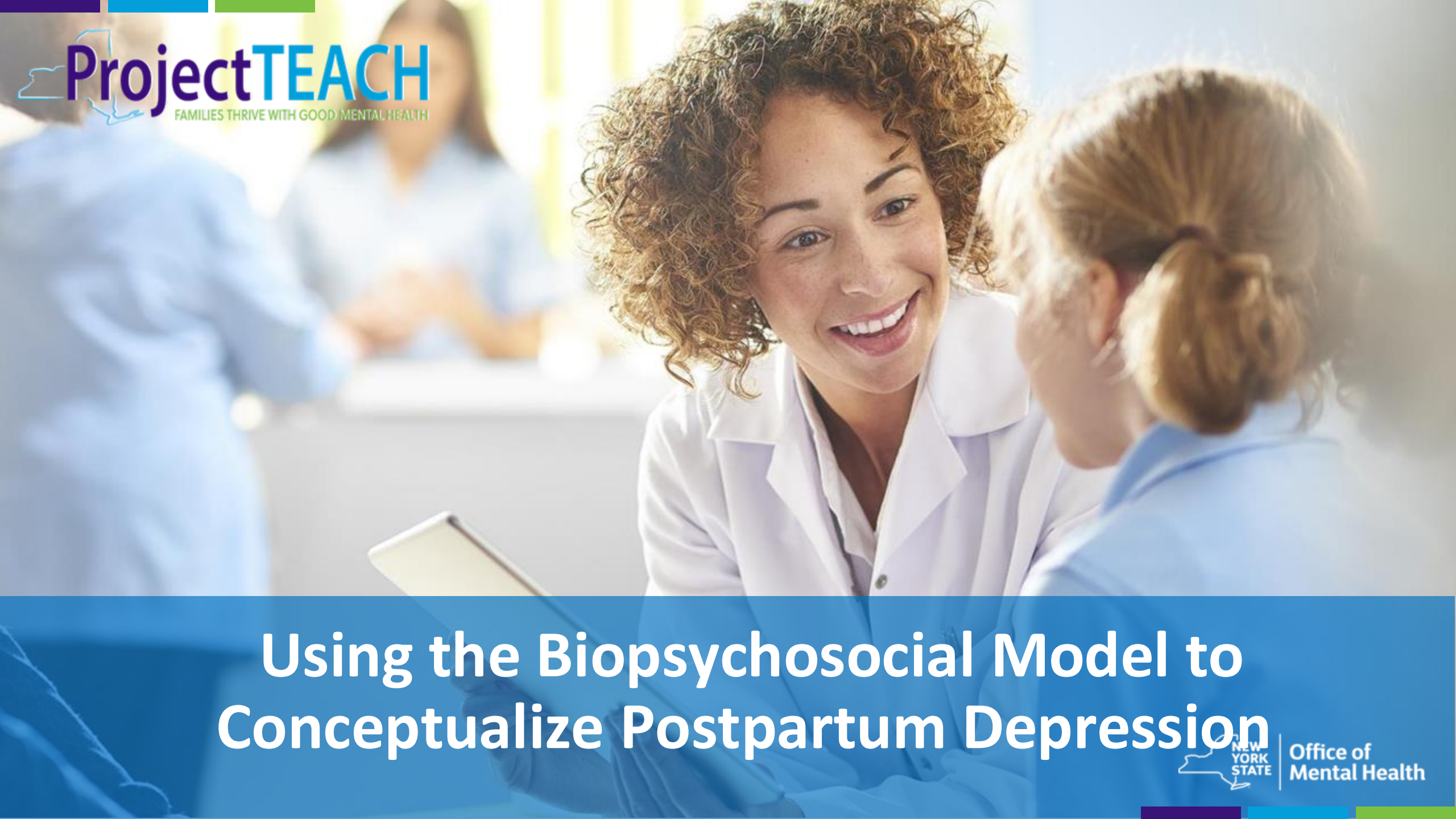

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Using the Biopsychosocial Model to Conceptualize Postpartum Depression

NEW YORK STATE | Office of Mental Health

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Learning Objectives

- Clinicians will be able conceptualize and treat peripartum distress more holistically.

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Agenda

- Brief overview of Biopsychosocial Model
- Discuss common biopsychosocial changes that occur for perinatal people
- Review research on how biopsychosocial factors influence risk for postpartum depression (PPD)
- Apply the biopsychosocial model to practice

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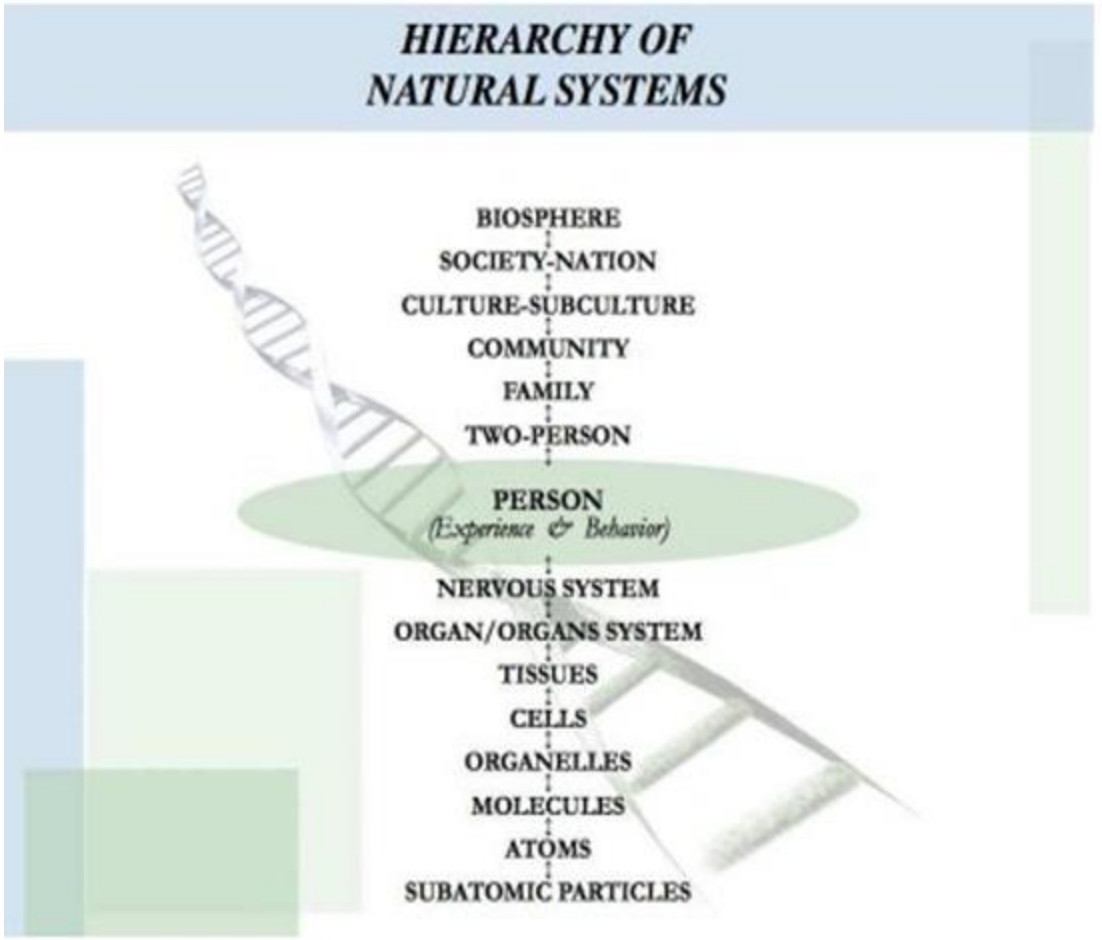
Case Example

Ms. Jackson is a 38-year-old patient who is 27-weeks pregnant. She has a medical hx of hypothyroidism for which she is prescribed Synthroid and a family history of Type 2 Diabetes. She presents to her OB/Gyn for discussion of her glucose tolerance test results. The OB/Gyn informs Ms. Jackson of her elevated blood sugar levels and that additional testing is required. Ms. Jackson becomes tearful and dysregulated.

Biopsychosocial Model

- Developed at the University of Rochester by George Engel, MD and John Romano, MD
- Systemically considers biological, psychological, and social factors and their complex interactions in understanding health, illness, and healthcare delivery (Engel, 1977)



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Applying the Biopsychosocial Approach to Clinical Practice

- Recognize that relationships are central to providing healthcare
- Elicit the patient's history in the context of life circumstances
- Decide which aspects of biological, psychological, and social domains are most important to understanding and promoting the patient's health
- Provide multidimensional treatment

(Engel, 1977)

Biopsychosocial Care Can Helps Reduce Bias and Health Inequities

- The current obstetrical system of care causes harm, contributing to preventable and premature death and worse mental health, particularly for marginalized people. (ACOG, 2024)
- The Biopsychosocial Model of care can help address the impact of social inequity and bias on mental health

Patients Prefer Biopsychosocial Care

- Pregnant people report it is important for their prenatal care clinicians to understand their mental health needs. (Itani, 2025)
- They want their clinicians to be
  - familiar and experienced
  - personally engaging
  - emotionally safe and supportive
  - trauma-informed
  - culturally responsive
- Patients also report it's important for their perinatal healthcare clinicians to know about their social needs (Peahl et al., 2023)
  - Many believe it is important even if their clinician cannot provide direct assistance

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Psychosocial Changes - Self

- Parenthood becomes a more salient role for women than it does for men (Wise et al., 2010)
- Common for women to think that they are “failing” at motherhood (Ayers et al. 2019)
- Body image can be adversely impacted
  - Influenced by critical versus supportive partner (Hodgkinson et al. 2014)
  - Difficulty feeling “sexy” or like a romantic partner and a mother at the same time (Hodgkinson et al. 2014)

Psychosocial Changes - Role Changes in Cisgender Heterosexual Couples

- Gender roles become more traditional (Wise et al., 2010)
  - Changes are more pronounced with less education, lower income, and more than one child
- Among educated dual earners, women's engagement in childcare and household labor increases significantly compared to men, even when they do not reduce paid work hours (Yavorsky, et al., 2015)
  - On average, fathers spend more than twice as much time engaging in leisure activities while their partner is performing housework and childcare compared to mothers (Dush, et al., 2017)
- Greater engagement in childcare by fathers is associated with greater satisfaction of both parents (Shapiro et al., 2019) and less partner conflict reported by mothers (Newkirk et al., 2017)

Psychosocial Changes - Roles Changes for Single and LGBTQ+ Parents is Understudied

- 40% of births are to unmarried women Births to unmarried women U.S. percentage 1980-2023| Statista
  - PPD risk doesn't differ between married, cohabitating, and single women (Urquia et al., 2013)
- 18% of LGBTQ adults are parenting children under 18 years (Wilson & Bouton, 2024)
  - May lack support due to rejection from family of origin over sexual orientation or gender minority status (Goldberg & Frost, 2024)

Psychosocial Changes - Relationships

- Although mothers often spend more time physically alone, solitude free from caregiving demands becomes scarce, contributing to increased loneliness and isolation (Ayers et al., 2019; Nguyen el al., 2025)
  - Personal time and time social time are linked to improvements in mood
- For many partnered individuals relationship conflict increases and partner supportive behavior decreases during the postpartum period (Doss et al., 2009; Huss, 2019)
- Generational differences in parenting practices and attitudes around mental health can make seeking support from parents difficult (Mamisachvili et al., 2013)

Biological Predictors of PPD

- Differences in hormone levels not associated with PPD, however sensitivity to changes in hormones may be (Yim et al., 2015)
- Primiparity (Di Florio et al, 2014)
- Previous pregnancy losses (Ito et al., 2025)
  - Bisexual and lesbian women more likely to experience miscarriage and stillbirth (Everett et al, 2019)
- Obstetrical complications
  - Hyperemesis gravidarum, gestational hypertension, preeclampsia (Kiewa et al., 2022; Meltzer-Brody, et al., 2017)
  - Black and American Indian/Alaska Native people are more likely to suffer serious pregnancy-related complications (Commonwealth Fund, 2020)
- Labor and delivery complications
  - Cesarean section, receiving general anesthesia during labor and delivery (GuglielminottI, et al., 2025; Meltzer-Brody, et al., 2017)

Psychological Predictors of PPD

- Past history of depression (Hoorelbeke et al., 2025)
- Family history of depression (Kimmel et al., 2015; Kjeldsen et al., 2022)
- Current depression (Kiewa et al., 2022)

  - Of note: one study found that up to 50% of women with antenatal depression never had a previous episode (Biaggi et al., 2016)

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Social Predictors of PPD

- High-quality relationships and social support protect against PPD (Yim et al., 2015)
- Conflict-ridden, abusive, and unsupportive relationships confer risk (Hoorelbeke et al., 2025; Yim et al., 2015)
- Relationships with mother and partner are particularly impactful (Yim et al., 2015)
- Increases in quality of bond with baby over time predict decreases in depression (Takacs et al., 2025)

Social Predictors of PPD cont

- Black and Latina people experience PPD at higher rates (Ehntholt et al., 2025; Khadka et al., 2024)
  - Experiences of discrimination prior to and during pregnancy predict PPD (Hipwell et al., 2025)
  - Among low income mothers, Black women experience greater risk for PPD when they lack paid maternity leave compared to White mothers (Shafer et al., 2025)
- Disability status (Bentley et al., 2025)
- Socioeconomic status/financial strain (Ku et al., 2024; Zong et al., 2025;)
- Neighborhood safety (Ku et al., 2024)
- Workplace and childcare-related stress (Beck 2001; Yim 2015)

Biopsychosocial factors interact to Predict PPD

- Reductions in stress hormones mediate the relation between family support and PPD (Han-Holbrook et al 2013)
- The relationship between immune function and PPD has been shown to be impacted by several psychosocial stressors including: (McCormack et al., 2023; Robertson Blackmore et al., 2016)
  - Intimate partner violence,
  - Sexual abuse history,
  - Race
  - Sleep disturbances

Tailored Approach to Social Needs in Perinatal Care

- ACOG (2025) recommends that early prenatal care assess social drivers of maternal health including:
  - Identities associated with marginalization and adverse health outcomes
  - Social network and support
  - Material needs
  - Education and employment

Assisting and Adjusting for Unmet Social Needs

Unmet Social Need	Potential Assistance	Potential Care Adjustment
Discrimination	Identity supporting groups, Peer counseling	Group prenatal care, doula/community health worker support, concordance between patient and provider
Social Isolation	Peer support programs Doula services Perinatal support groups	Group prenatal care, doula or peer support at prenatal visits
Food Insecurity	Connection to government assistance (Women, Infants and Children; Supplemental Nutrition Assistance Program) Food pantries Food delivery	Nutrition consultation Monitoring of weight gain in pregnancy

Adapted from ACOG, 2025

For more information about this model, and implementation strategies visit ACOG's website.

Case Example

The OB/Gyn is aware from earlier discussions that Ms. Jackson had a previous late-term pregnancy loss and struggled to become pregnant again. Her mother passed away two years ago at age 62 following a long history of diabetes and cardiovascular disease. She describes her husband as very supportive but he is in the National Guard on deployment. He should be able to return home briefly for the birth of the baby, but will be gone for the next seven months. They live in his hometown and she has limited social support. His family disapproves of their biracial and interfaith relationship. She is worried about how they will afford to support themselves while she is on maternity leave from her job as a teaching assistant. Ms Jackson reports previous treatment for depression.

Biopsychosocial Response

- Acknowledge distress
- Assess which biopsychosocial factors are the priority
- Develop plan in response to identified priorities
- Partner with multidisciplinary team already in place

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Biopsychosocial Plan

Biological	Psychological	Social
• Continue Synthroid • Complete Gestational Diabetes Assessment	• Assess for Depressive Symptoms • Provide education about PPD and postpartum blues • Offer psychotherapy	• Acknowledge life stressors • Link with doula • Refer for financial benefits evaluation

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Summary

- Prenatal care includes biopsychosocial components (as well as spiritual, family, etc.)
- Patient context allows for more informed, responsive and effective patient care
- Can feasibly incorporate multidisciplinary elements into care plan

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