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## Reproductive Health

# Facilitators and Barriers to Healthy Pregnancy Spacing among Medicaid Beneficiaries: Findings from the National Strong Start Initiative



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## ABSTRACT

**Background:** Closely spaced, unintended pregnancies are common among Medicaid beneficiaries and create avoidable risks for women and infants, including preterm birth. The Strong Start for Mothers and Newborns Initiative, a program of the Center for Medicare and Medicaid Innovation, intended to prevent preterm birth through psychosocially based enhanced prenatal care in maternity care homes, group prenatal care, and birth centers. Comprehensive care offers the opportunity for education and family planning to promote healthy pregnancy spacing.

**Methods:** As of March 30, 2016, there were 42,138 women enrolled in Strong Start and 23,377 women had given birth. Individual-level data were collected through three participant survey instruments and a medical chart review, and approximately one-half of women who had delivered ( $n = 10,374$ ) had nonmissing responses on a postpartum survey that asked about postpartum family planning. Qualitative case studies were conducted annually for the first 3 years of the program and included 629 interviews with staff and 122 focus groups with 887 Strong Start participants.

**Results:** Most programs tried to promote healthy pregnancy spacing through family planning education and provision with some success. Group care sites in particular established protocols for patient-centered family planning education and decision making. Despite program efforts, however, barriers to uptake remained. These included state and institutional policies, provider knowledge and bias, lack of protocols for timing and content of education, and participant issues such as transportation or cultural preferences.

**Conclusions:** The Strong Start initiative introduced a number of successful strategies for increasing women's knowledge regarding healthy pregnancy spacing and access to family planning. Multiple barriers can impact postpartum Medicaid participants' capacity to plan and space pregnancies, and addressing such issues holistically is an important strategy for facilitating healthy interpregnancy intervals.

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Closely spaced pregnancies generate risks for women and infants (Conde-Agudelo, Rosas-Bermúdez, Castaño, & Norton, 2012). Despite the importance of planning any future pregnancies to optimize subsequent pregnancy outcomes, many women face postpartum barriers to healthy spacing for their

next pregnancy. This article investigates postpartum family planning access for women enrolled in the Center for Medicare and Medicaid Innovation's Strong Start for Mothers and Newborns initiative, a program designed to reduce rates of preterm birth and other adverse pregnancy outcomes for Medicaid and Children's Health Insurance Program (CHIP) participants (for simplicity, both programs generally are referred to as Medicaid hereafter).

Approximately one-third of pregnancies among multiparous women are conceived within 18 months of the prior birth, considered a short interpregnancy interval (SIP; Gemmill & Lindberg, 2013). SIPs do not allow sufficient time for a woman's body to heal and increase risks for complications such as

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placental disorders that lead to maternal hemorrhage, a primary cause of maternal mortality (Conde-Agudelo, Rosas-Bermúdez, & Kafury-Goeta, 2006; Conde-Agudelo et al., 2012; Creanga et al., 2015). Infants born after a SIPI are at increased risk for being born preterm (before 37 completed weeks' gestation), at low birthweight (less than 2,500 grams) or small for gestational age (Conde-Agudelo et al., 2006, 2012; DeFranco, Stamilio, Boslaugh, Gross, & Muglia, 2007). Preterm birth is a leading cause of infant mortality (Centers for Disease Control and Prevention, 2016).

After a woman has given birth, a subsequent pregnancy may not be planned. Approximately one-half of pregnancies among American women are unintended (Finer & Zolna, 2016), with higher rates among women who are younger, unmarried, Black or Hispanic, low income, or without a bachelor's degree (Finer & Zolna, 2016). Women with unplanned pregnancies are more likely to give birth preterm and to have low birthweight infants (Gipson, Koenig, & Hindin, 2008; Shah et al., 2011), and are at higher risk for depression and long-term negative effects on well-being (Gipson et al., 2008; Sonfield, Hasstedt, Kavanaugh, & Anderson, 2013). As the payer for approximately one-half of births nationally (Markus, Andres, West, Garro, & Pellegrini, 2013), Medicaid covers maternity care for a large proportion of unintended pregnancies at great cost (Guttmacher Institute, 2016; Wind, 2015).

Family planning, including contraception, is the most effective way to ensure healthy birth spacing (Garro, 2015). Women who use contraceptives consistently account for only 5% of unplanned pregnancies (Sonfield, Hasstedt, & Gold, 2014). Multiparous women not using contraceptives have the highest rates of SIPIs, whereas the highest rate of optimal birth intervals is achieved among women using long-acting reversible contraceptives (LARCs) (de Bocanegra, Chang, Howell, & Darney, 2014). However, women, especially Medicaid beneficiaries, often face postpartum barriers to optimal pregnancy spacing. Previous research indicates that contraceptive adoption among Medicaid participants is best achieved through shared decision making that prioritizes women's values and life contexts (Yee & Simon, 2011), but many providers continue to follow physician-centered, paternalistic models (Bernabeo & Holmboe, 2013; Charles, Gafni, & Whelan, 1999) because of time constraints or a belief that shared decision making will not work (Elwyn et al., 2013). Some women are not aware that SIPIs present a health risk (Bryant, Fernandez-Lamothe, & Kupperman, 2012).

Although rates vary, many Medicaid beneficiaries do not attend a postpartum visit (Bennett et al., 2014; Wilcox, Levi, & Garrett, 2016). Especially when a postpartum visit is unlikely, a woman should leave her birth facility with family planning established, but many state Medicaid programs only offer separate reimbursement for family planning at post-discharge outpatient visits (Wachino, 2016; Walls, Gifford, Ranji, Salganicoff, & Gomez, 2016). Even motivated women with supportive providers may have to attend multiple clinic appointments or face other barriers depending on the method selected, state policies, or personal circumstances.

This article investigates experiences of Medicaid participants in the Center for Medicare and Medicaid Innovation's Strong Start for Mothers and Newborns initiative. We explore education about pregnancy spacing, postpartum contraceptive access to prevent unplanned pregnancies and SIPIs, women's family planning choices, and barriers and facilitators to healthy pregnancy spacing.

## Methods

### *The Strong Start Initiative*

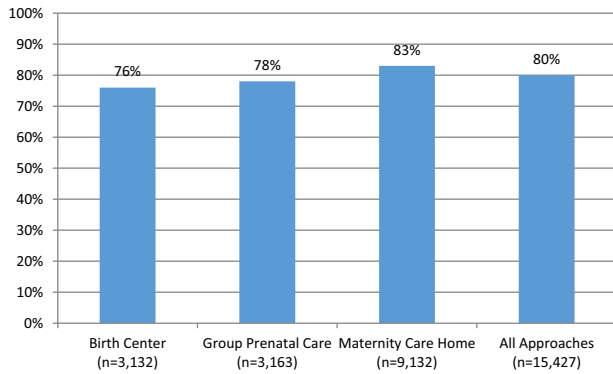
Strong Start offers enhanced prenatal care through birth centers, group prenatal care,<sup>1</sup> or maternity care homes and is intended to reduce rates of preterm birth and low birthweight among Medicaid- and CHIP-enrolled women. The program began in 2013 with 27 awardees operating more than 200 sites in 30 states, the District of Columbia, and Puerto Rico (Centers for Medicare and Medicaid Services, 2017). Most Strong Start programs focused on relationship-based care and care coordination along with referrals and health education (Hill et al., 2016). Awardees, which included health systems, national organizations, state agencies, and medical practices, began serving women in 2013 and 2014, with all births expected by the end of 2016.

Data collection for the national Strong Start evaluation began in 2013, with approval from the Institutional Review Board of the Urban Institute. The mixed-methods evaluation included participant surveys, chart reviews, and qualitative case studies. Individual-level data were collected through three participant survey instruments and a medical chart review. Participants completed forms at intake, during their third trimester, and postpartum. Strong Start staff completed a medical chart review after delivery or discharge from the program. Forms were submitted with identification numbers, and a crosswalk was sent to a separate site, allowing linking of individuals to the personal information on the forms. See Hill et al. (2016) for additional details on participant-level data collection methods and copies of each form.

As of March 30, 2016, there were 42,138 women enrolled in Strong Start and 23,377 women had given birth. Approximately one-half of those women ( $n = 10,374$ ) had nonmissing responses on the postpartum survey, in which respondents are asked if they are "doing anything now to keep from getting pregnant?" and, if so, "What kinds of birth control are you using?", followed by a comprehensive list of options. Women are asked to check all that apply.

A team of uniformly trained researchers collected qualitative data annually using triangulated case study methods. Over the evaluation's first 3 years (March 2014 to March 2016), data collection included 629 in-person or telephone interviews with key informants selected because they were involved in implementing Strong Start (e.g., awardee program managers, clinic administrators, prenatal care providers, and staff from partner organizations). The semistructured interviews included questions about whether the Strong Start site offered family planning services, the points at which family planning was discussed, which methods were offered, how patients selected methods, how Strong Start's approach to family planning compared to typical prenatal care, and contraceptive access barriers. The team also conducted 122 focus groups with 887 Strong Start enrollees who were recruited because they received care at the provider sites participating in the case study interviews. Using a semistructured discussion guide, focus group facilitators explored participants'

<sup>1</sup> Strong Start awardees implementing group prenatal care predominantly used the CenteringPregnancy approach, an evidence-based model of group prenatal care formalized in 1998 through the Centering Healthcare Institute (CHI), a 501(c) 3 nonprofit organization that assists health care providers in making the changes needed to implement group prenatal care. For more information about CHI or CenteringPregnancy, see <https://www.centeringhealthcare.org/>.



**Figure 1.** Strong Start Participant reports of postpartum birth control counseling. Missing data are excluded from these calculations.

experiences with family planning under Strong Start, including when family planning was discussed, the content and helpfulness of family planning counseling, sources of postpartum family planning care, barriers to contraceptive access, and information received about optimal child spacing. Researchers obtained informed consent from all interviewees and focus group participants using institutional review board–approved procedures. All focus groups were recorded digitally and attended by a note taker in addition to the facilitator.

Data were cleaned, organized by theme, and coded and analyzed using the software program NVivo (QSR International, Burlington, MA) and a framework designed to address the evaluation's primary research questions. The team conducted multiple rounds of qualitative database testing to obtain high intercoder and intracoder reliability. More in-depth information about the federal program evaluation's methods is available in the evaluation annual reports (Hill et al., 2016).

## Results

Participant-level data from intake forms indicate that rates of unintended pregnancy are high among Strong Start participants (71%), especially among multiparous women with SIPIs (77%).<sup>2</sup> Most women reported receiving postpartum family planning counseling (Figure 1), but at the time of their postpartum survey many women had not chosen a contraceptive method or indicated using less effective methods (Table 1). Interview and focus group data revealed barriers to effective adoption of family planning. These barriers related to providers and programs, state and institutional policies, and Strong Start participants themselves.

### Provider and Program-Related Barriers

Many Strong Start programs intentionally initiated family planning and healthy birth spacing discussions with participants. Because Strong Start was designed as a program to prevent preterm birth, many awardees prioritized discussing healthy pregnancy spacing to prevent subsequent preterm births among Strong Start participants. Most women appreciated the information and reported many prenatal conversations about family planning and the importance of waiting 18 to 24 months before becoming pregnant again.

Prenatal and postpartum education and care were not always well-connected, however. Group prenatal care sites, which generally followed the curriculum developed by the Centering Healthcare Institute, had a protocol for prenatal family planning education, but did not usually include a postpartum group session. Maternity care homes and birth centers had more individualized programs, with some emphasizing ongoing family planning education to promote healthy pregnancy spacing, some providing information at specific points, and others not including such discussions. Participants indicated that hearing about family planning only in the postpartum period was inadequate to allow for educated decision making and follow through on obtaining contraception to prevent a potential SIPI. At one site where the lead provider believed women were not receptive to family planning information until after delivery, a participant noted:

I feel like there needs to be more information on birth control and ... [pregnancy] spacing or family planning. I guess they group it all together as part of post-[partum] care. I think that falls off here ... it kind of sucks to feel like once you've had your baby, there is no help.

Some providers focused education on specific methods of contraception, particularly LARCs. A number of women served by such providers reported feeling pressured to accept an intrauterine device (IUD) or implants, which they sometimes interpreted as attempts to control their fertility, rather than as health guidance for preventing risks associated with closely spaced pregnancies. One woman said,

[Family planning counseling is] very up in your face. If I decide to come back at 6 weeks pregnant, you don't have to take care of that baby. What do you care? You don't know if I can afford to have a baby.

Staff at another program remarked that they had to be careful to avoid such perceptions among participants:

We talk about intervals, and try not to come off as judgmental. We don't want to say someone can't afford her kids. So we say it's healthier to wait at least a year, having another kid puts your current kids at risk.

Some women who reported being pressured to accept an IUD had the device removed after a few months because they were not fully aware of the side effects and found them intolerable; they did not necessarily adopt an alternative method, even though they were still at risk for a SIPI. In contrast, some providers seemed to pressure women to accept methods other than LARCs. One program educated participants about options prenatally, and many women intended to choose a LARC for postpartum birth control that would last several years. But program staff expressed frustration that women's final decisions were made during postpartum visits with providers who might push their preferred method—often oral contraceptives—because “old habits die hard.” In contrast with LARCs, pills are less effective, and women may discontinue use because of difficulty in getting to a pharmacy or renewing a prescription. In another program, with family planning education limited to brochures and an optional video that few women viewed, a key informant reported heavy reliance on Depo-Provera because of its convenience for providers after delivery. She noted that many women did not come in for follow-up injections and attributed high rates of unintended SIPIs to this lack of follow-up.

Some providers did not adapt practices to the most recent evidence-based recommendations. Current recommendations

<sup>2</sup> Participant completion rates for these measures exceed 80%.

**Table 1**  
Postpartum Contraceptive Use among Strong Start Enrollees Using Contraception

|  | By Model, % (N) |                     |                     |               |
|--|-----------------|---------------------|---------------------|---------------|
|  | Birth Center    | Group Prenatal Care | Maternity Care Home | Total         |
| Did not specify method   | 4.39 (103)      | 3.12 (64)           | 2.34 (140)          | 2.96 (307)    |
| Spermicide or withdrawal   | 1.96 (46)       | 1.02 (21)           | 1.76 (105)          | 1.66 (172)    |
| Natural family planning methods (i.e., rhythm method)                | 13.59 (319)     | 2.73 (56)           | 2.81 (168)          | 5.23 (543)    |
| Barrier methods (condoms)  | 27.43 (644)     | 22.70 (466)         | 12.19 (728)         | 17.72 (1,838) |
| Renewable hormonal methods (i.e., oral contraceptives, Depo Provera) | 14.14 (332)     | 26.69 (548)         | 36.95 (2,207)       | 29.76 (3,087) |
| LARCs (IUDs or implants)   | 13.20 (310)     | 22.55 (463)         | 22.58 (1,349)       | 20.45 (2,122) |
| Sterilization (vasectomy, tubal ligation)                            | 7.37 (173)      | 13.30 (273)         | 13.76 (822)         | 12.22 (1,268) |
| Other  | 17.93 (421)     | 7.89 (162)          | 7.60 (454)          | 10.00 (1,037) |
| Total  | 2,348           | 2,053               | 5,973               | 10,374        |

*Abbreviations:* IUD, intrauterine device; LARC, long-acting reversible contraceptive.

Note: Participants were instructed to select all options that apply; however, in this table each woman is only included in the category corresponding to the most effective method she indicated using. In addition, many women who selected “something else” indicated they are abstaining from sex, have plans to get an IUD, or are undecided.

support postplacental IUD insertion for women who want IUDs because, even with a higher chance of expulsion, there are few health contraindications to immediate uptake, continuation rates are high, and postponing insertion increases the risk of an immediate unintended pregnancy (American College of Obstetricians and Gynecologists, 2011, 2016; Diedrich, Zhao, Madden, Secura, & Peipert, 2015). Key informants for one program asserted that women could receive an implant or IUD immediately postpartum. However, a focus group participant in this program reported,

I wanted the 5-year IUD. I asked when that would be possible. They said it would be done at the 6-week postpartum visit. It gives your uterus a chance to get back to normal size.

Key informants for another program that supported postplacental IUD placement reported that some older physicians in their clinic would only insert an IUD when a woman was menstruating.

#### Policy Barriers

Both state and institutional policies impacted women's postpartum family planning access. Reimbursement for LARC placement is sometimes too low to make provision financially feasible for smaller practices such as birth centers. In many states, Medicaid does not offer separate reimbursement for LARCs—methods with considerable upfront costs, ranging from \$700 to \$850 at average wholesale price (Trussell, 2012)—unless the LARC is offered at an outpatient visit after discharge from the birth facility. Some Strong Start programs established workarounds for reimbursement. One with low postpartum appointment attendance discharged postpartum women who wanted an IUD from the hospital, immediately registered them as outpatients, and conducted insertions at the outpatient clinic before women left the hospital campus. Other programs encouraged a Depo Provera shot that could serve as a “bridge” until LARC placement at the postpartum check-up, although some staff expressed concern that women did not always follow up postpartum.

Laws regarding scope of practice for providers could also limit women's options. Certified nurse midwives and certified midwives can usually offer a full range of contraceptive options, but the scope of other licensed midwives (e.g., certified professional midwives) precludes prescribing contraceptives or inserting LARCs. Women receiving services from birth centers employing only licensed midwives must obtain these methods from

providers at other locations, and appropriate referral sources are sometimes in short supply.

Sites run by religious organizations did not always provide comprehensive family planning information because of religious prohibitions around contraception. Generally, the standard of care at these sites involved emphasis on abstinence or “natural” methods and sometimes prohibited discussion of other options. Some providers at these sites tried to circumvent family planning education prohibitions, as at one site where a participant reported,

We talked about all the [birth control] options, but the nurses say, wink, wink, we can only suggest abstinence.

However, even when women received education, these facilities did not provide contraceptives and women had to go elsewhere to obtain them. In some cases, women thought that religious institutions' policies against contraception were Medicaid policies and that they had been denied coverage for LARC or tubal ligation.

#### Participant Barriers

Women without family planning established before postpartum discharge appeared at high risk of a SIPI. Key informants pointed out women's many barriers to attending their postpartum visit, including lack of access to transportation, Medicaid-provided transportation policies that would not allow newborns or other children, lack of childcare, or a general feeling that a postpartum visit was not important. If a woman must find a new provider or attend multiple visits to get her preferred contraceptive, she may become pregnant before completing all of the visits, or she may lose her Medicaid eligibility before she receives a LARC. Women who lose insurance may also have cost, transportation, or other barriers to filling ongoing prescriptions or returning to a provider for Depo Provera injections. Many awardees noted that even when women attended a postpartum visit, it was common for them to arrive already pregnant.

Some women's preferences conflicted with birth spacing advice, and some did not recall receiving family planning education recorded by providers. Care coordinators for one program noted that women sometimes reported on postpartum surveys that no one had spoken to them about family planning, even though the care coordinator had documented such a conversation. In another program in which certified family planning educators provided ongoing education on healthy birth spacing, a focus group participant announced,

I want another kid, so I am not going to take birth control.

In other cases, women rejected family planning, even to promote healthy birth spacing, because of religious or cultural beliefs. One site said that the large Russian Orthodox population in their area is opposed to birth control and would be offended if providers raised the topic. An informant at a group care site serving many Hispanic immigrants said that, although the contraception session helped to overcome “taboos,” ultimately one-third of participants declined contraception on religious or cultural grounds or because of objection from partners.

In response to the Strong Start Postpartum Survey question asking whether enrollees are currently “doing anything to keep from getting pregnant,” 69% of women reported that they are, 27% said that they are not, and 4% reported they are unsure. Among women who reported family planning, renewable hormonal methods—the pill and the shot—were the most common. Birth center participants report using natural family planning at much higher rates than participants in group care or maternity care homes. These participants are also far more likely to report breastfeeding as their family planning method, although studies indicate that most women who use the lactational amenorrhea method do not practice it correctly (Fabric & Choi, 2013). Overall, nearly one-third of women using contraception chose sterilization or LARC, the most effective methods to prevent pregnancy and thus prevent SIPIs.

## Discussion

Most Strong Start programs worked hard to promote healthy birth spacing by providing family planning education and ensuring women had access to contraceptives, and evidence indicates that both postpartum visit attendance and contraceptive uptake may be higher among Strong Start participants than among postpartum Medicaid participants more generally (de Bocanegra et al., 2017). Even so, participants did not always understand or apply this information. Women were sometimes overwhelmed if all education was conducted in one visit, especially if they had already given birth. The one-third of postpartum women using no contraception remained at very high risk of a SIPI. There is also considerable risk for SIPIs among women choosing less effective methods or moderately effective methods that require ongoing engagement and effort to use, such as the pill and the shot, because inconsistent use and early discontinuation are common.

Evidence-based information was not always supported by policy or practice. Even though current evidence-based recommendations support immediate postpartum insertion of LARC, many state Medicaid programs do not offer reimbursement for LARCs separate from the global prenatal care and birth fee until a woman returns for her postpartum outpatient visit. Women can get pregnant during this gap, putting them at high risk for very closely spaced pregnancies, especially if they are not exclusively breastfeeding (most low-income mothers who initiate breastfeeding have stopped or are supplementing within a month of giving birth; see Gross et al., 2011). Although some programs creatively circumvented restrictive LARC reimbursement policies, most waited to provide LARC until the woman's postpartum check-up, even though data indicate that almost one-half of women have resumed sexual intercourse at this point (Brito et al., 2009) and so may already be pregnant, and many women do not attend their postpartum visit. When midwives faced scope limitations that preclude prescribing or inserting contraceptives, women also faced barriers to attending follow-up appointments elsewhere, especially because some birth

centers did not have a well-established referral system to meet these needs.

Other barriers to evidence-based information included affiliations with religious institutions and provider bias. Women were not always adequately informed of all their options if the provider had faith-based prohibitions around family planning. A didactic provider approach and lack of shared decision making led to distrust of providers for some women, whereas others agreed to a provider's recommendation only to abandon the method long before they wished to become pregnant. Women are most likely to use contraception when they are supported in choosing a method that meets their personal needs and preferences, even when that method is not preferred by the provider or is not viewed as highly effective for women in general (Gomez, Fuentes, & Allina, 2014). A provider's adherence to outdated protocols or his or her own biases can thwart a woman's timely access to high-quality family planning and increase her risk for an unplanned SIPI.

Women also face numerous barriers to attending health care visits generally, and having a newborn can exacerbate these barriers. If a woman has to seek a new provider or attend multiple visits to get her contraceptive method of choice, she may become pregnant again before completing all the visits; or, she may lose her Medicaid or CHIP eligibility before she receives a LARC and thus have a rapid repeat pregnancy. If she knows she will lose coverage, she may be reluctant to accept a LARC with no plan on how to have it removed, or she may not want to start a prescription that she will not be able to afford in the long term. Women with religious or cultural resistance to contraception may choose “natural” methods, such as rhythm or breastfeeding, that require substantial participant awareness and effort to be effective, or they may reject family planning altogether. Few women abstain from intercourse for the period of time that would be required to prevent a SIPI.

Overcoming any one barrier does not eliminate the others. Even if Medicaid reimburses immediate postpartum LARC insertion, a provider still must be willing to do the insertion at that time, and a woman has to feel comfortable with the method. Helping women to overcome barriers to attending postpartum appointments does not mean they will choose effective methods of birth control that will ensure optimal pregnancy spacing. Conversely, a woman can desire a highly effective method but not return for a postpartum visit to acquire it or arrive at the appointment already pregnant.

## Implications for Policy and/or Practice

Postpartum Medicaid and CHIP participants face multiple barriers to healthy pregnancy spacing, including inadequate information and education, institutional and state policies, provider misinformation and bias, and difficult personal circumstances. Many Strong Start programs worked to overcome these barriers with some success, specifically through ongoing education and efforts to empower patients. Changes in Medicaid policies occurring in some states may allow more participants to have immediate postpartum access to the most effective forms of reversible contraception, allowing women to carefully plan subsequent pregnancies, although some states maintain payment policies that discourage immediate uptake.

Facing any one of many possible barriers can thwart a woman's access to family planning and her ability to postpone a subsequent pregnancy for at least 1 to 2 years. Engaging women in the prenatal period through education and shared decision

making, rather than didactic approaches or pressure to adopt a provider's recommendation, is a strong predictor of successful postpartum family planning. Postpartum barriers to care and contraceptive access also need to be addressed to effectively reduce the risk of SIPIs that can lead to preterm birth and other poor outcomes for women and children.

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