

# Institute for Health and Recovery

## Integrated Screening Tool

Women's health can be affected by emotional problems, alcohol, tobacco, other drug use, and domestic violence. Women's health is also affected when those same problems are present in people close to us. By "alcohol," we mean beer, wine, wine coolers, or liquor.

<b>Parents</b> Did any of your parents have a problem with alcohol or other drug use?	<b>YES</b> <input type="checkbox"/>			<b>NO</b> <input type="checkbox"/>
<b>Peers</b> Do any of your friends have a problem with alcohol or other drug use?	<b>YES</b> <input type="checkbox"/>			<b>NO</b> <input type="checkbox"/>
<b>Partner</b> Does your partner have a problem with alcohol or other drug use?			<b>YES</b> <input type="checkbox"/>	<b>NO</b> <input type="checkbox"/>
<b>Violence</b> Are you feeling at all unsafe in any way in your relationship with your current partner?		<b>YES</b> <input type="checkbox"/>		<b>NO</b> <input type="checkbox"/>
<b>Emotional Health</b> Over the last few weeks, has worry, anxiety, depression, or sadness made it difficult for you to do your work, get along with people, or take care of things at home?				<b>YES</b> <input type="checkbox"/> <b>NO</b> <input type="checkbox"/>
<b>Past</b> In the past, have you had difficulties in your life due to alcohol or other drugs, including prescription medications?			<b>YES</b> <input type="checkbox"/>	<b>NO</b> <input type="checkbox"/>
<b>Present</b> In the past month, have you drunk any alcohol or used other drugs? 1. How many <b>days per month</b> do you drink? _____ 2. How many <b>drinks on any given day</b> ? _____ 3. How often did you have <b>4 or more drinks per day</b> in the last <b>month</b> ? _____			<b>YES</b> <input type="checkbox"/>	<b>NO</b> <input type="checkbox"/>
<b>Smoking</b> Have you smoked any cigarettes in the past three months?			<b>YES</b> <input type="checkbox"/>	<b>NO</b> <input type="checkbox"/>

Review Risk

Review Domestic Violence Resources

Review Substance Use, Set Healthy Goals

Consider Mental Health Evaluation

### Advise for Brief Intervention

	Y	N	NA
Did you State your medical concern?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did you Advise to abstain or reduce use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did you Check patient's reaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did you Refer for further assessment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

At Risk Drinking	
Non-Pregnant	Pregnant / Planning Pregnancy
> 7 drinks / week > 3 drinks / day	<b>Any Use is Risky Drinking</b>

**For the best health of mothers and babies, we strongly recommend that pregnant women, or those planning to become pregnant, do not use alcohol, illegal drugs or tobacco. Safe levels of usage have not been determined.**

Date: \_\_\_\_\_

Language: \_\_\_\_\_

Race: \_\_\_\_\_

Ethnicity: \_\_\_\_\_

# Rationale for Utilization of the 5P'S

The Institute for Health and Recovery's Integrated 5 P'S Screening Tool is based on Dr. Hope Ewing's 4 P's (Parents, Partner, Past and Pregnancy)<sup>1</sup>, and was designed specifically for pregnant women. The 4 P's have been adapted by IHR, and, in another iteration, by Dr. Ira Chasnoff of the Children's Research Triangle (see below). IHR has utilized the 5 P'S successfully in six years of the *Alcohol Screening Assessment in Pregnancy Project*, and in 18 months of the *Fetal Alcohol Screening for Today Project*. An article describing our utilization of the 5 P'S in prenatal settings was recently published in the *Maternal and Child Health Journal*

<sup>2,3</sup>

The IHR 5 P'S was developed through funding by the Maternal and Child Health Bureau for the ASAP Project and is in the public domain.

We have chosen the 5P'S for its simple structure and its relational base. It is a quick, easy, non-threatening, and effective tool for use in busy, resource-challenged prenatal care offices. It effectively asks a pregnant woman about her own use of alcohol in a nonjudgmental manner. For women at risk for use or not yet ready to report their own use, the 5P'S asks about alcohol and other drugs by people who are most likely to be important in a woman's life: her Partner and her Parents<sup>3</sup>. Research has shown that women who are in relationships with partners or have parents who have alcohol/drug problems are more likely to use themselves<sup>4</sup> and are also at risk for other medical concerns, such as infectious disease.<sup>5</sup> The 5P'S also encourages a woman to report a Past or Present problem with alcohol. The instrument opens the door to a possible conversation about a patient's current alcohol or drug use, her past use, or use among people in close relationship to her. Each "P" and/or Smoking represents a documented risk for substance use during pregnancy. The 5 P'S can be embedded into existing office forms, used as part of a fuller pregnancy needs assessment as a self-administered written questionnaire (*SAQ*), or included in electronic medical records.

In ASAP, the 5P's were asked in a specific order that started with a question about someone else's alcohol use (Parents). Each subsequent question brought the issue of alcohol use closer to the pregnant women (Peers, Partner) until the last two questions asked about the patient's Past and use during this Pregnancy (present). This sequence was established to be as non-threatening as possible. Each of the risk assessment tools utilized in ASAP asked an additional question about tobacco use because of the documented link between pregnant women's tobacco and alcohol use.<sup>6,7</sup> Using the 5P'S, including the tobacco use question, 35.5% of the pregnant women screened in ASAP over the first three years had at least one risk factor; the percentage has increased to 47% in more recent years. Most of those patients who screened in responded positively to the questions regarding tobacco use (ASAP1:58% community health centers, 45% private practices) and parental alcohol problem (31% community health centers, 12% private practices). ASAP2 figures are currently being analyzed. In accordance with the ASAP protocol, if a pregnant woman responded positively to any of the 5P'S or the tobacco use question, she would also receive a brief intervention. Implementation protocols for the 5 P'S may be found in *Alcohol Screening Assessment in Pregnancy: The ASAP Curriculum*<sup>8</sup>, written and edited by the Institute for Health and Recovery.

Project FAST proposed to reduce the number of questions that can result in a positive screen at the request of prenatal care staff from ASAP sites. Prenatal staff felt that "parental" and "peer" use was less indicative of risk than "partner," "past," "present," or "tobacco," and that fewer positive responses resulted in the time savings of few brief interventions. As time issues are of paramount importance to medical staff, ASAP flexibility was an important factor in keeping busy prenatal sites engaged in the project. Positive responses to "parental" and "peer" indicate that a woman is at risk of alcohol use and prenatal staff use this opportunity to discuss risk with them.

In ASAP 1, a consultant conducted interviews with both patients who had completed the risk assessment with the 5P's embedded and with prenatal care staff at participating sites. Patient interviews found that when patients were asked about the 5P'S, they reported that they felt the set of questions was appropriate and understood them to be health related. Fifty per cent reported that they found themselves thinking about issues raised in the questionnaire after the screening process had been completed.

The following comments from the prenatal care staff offer their views on the choice of embedding the 5P's within a risk assessment at the initial visit:

*"We liked the alcohol screening questions. It was easier for the patients to answer questions about other people as opposed to themselves."* (Lynn Community Health Center)

**"Clients may deny use throughout pregnancy, but they are open to discussion about other people's use."** (*Great Brook Valley Community Health Center, Worcester*)

*"We considered it a guide for talking to patients about sensitive issues. We liked it because it looked at all aspects of a women's life, the whole person and issues."* (Lynn Community Health Center)

*"It is always a plus to have a tool that helps you look at risk behaviors."* (Great Brook Valley Community Health Center, Worcester)

In addition to healthcare sites, IHR has successfully utilized the 5P'S screening/engagement tool in different settings:

- A Substance Abuse and Mental Health Services Administration-funded IHR project (Project RISE) provided intensive clinical case management services to homeless pregnant and parenting women with substance abuse problems living in motel rooms and shelters funded by the Massachusetts Department of Transitional Assistance. Although this project ended, the Massachusetts Department of Transitional Assistance has funded a similar program through IHR, utilizing the 5 P'S (RISE II).
- A Massachusetts Department of Transitional Assistance-funded FOR Families program, a home visiting program serving families leaving public assistance or living in "welfare motels."
- A Center for Substance Abuse Treatment-funded project (Project WAVE) serving women and families in domestic violence shelters who are affected by mental illness, substance abuse and/or trauma.

National trainings on the IHR 5 P'S have taken place in Louisiana and New York, with upcoming trainings in California and another site in New York.

The Integrated 5 P'S Screening Tool expands on the original ASAP 5 P'S through reformatting the questions and providing visible pathways for provider utilization. Although questions regarding depression and domestic violence have been included in the ASAP 5 P'S, this new formatting has been welcomed by providers in the field. Harvard Pilgrim Health Plan was the first to utilize this tool in their innovative, telephonic case management program for women with high-risk pregnancies.

Dr. Ira Chasnoff, a respected pediatrician dedicated to improving children's health through maternal alcohol screening, uses a version of the original 4 P's that he and his colleagues developed and copyrighted. Dr. Chasnoff and the Children's Research Triangle, Inc. in Illinois received funding from the same HRSA source that funded ASAP1 and ASAP2. His tool does not include "peers" and is formatted to include a "field assessment," or brief intervention pathways. Although the actual tools are differently formatted and ask some different questions than the IHR 5 P'S, the rationale for their use is transferable to the IHR 5 P'S. Please see below The Children's Research Triangle's rationale for the "4 P's Plus."

### Excerpts from "Research Basis of the 4P's Plus©"

"For the past several years, the research team at Children's Research Triangle (CRT) has been involved in developing and field-testing a screening methodology that will identify pregnant women at risk for alcohol and illicit drug use. The 4P's Plus© is a five-question screen specifically designed to quickly identify obstetrical patients in need of in-depth assessment or follow up monitoring. Taking less than one minute, it can easily be integrated into the initial prenatal visit and used for follow up screening through the pregnancy. The five questions are broad-based and highly sensitive.

The first step in the development of the 4P's Plus was a three-year study funded by the Health Care Financing Administration, the results of which were published in 2001.<sup>9</sup> The goal of the study was to identify risk factors for substance use during pregnancy. Participants were 2,002 Medicaid-eligible pregnant women with two or less visits to prenatal care clinics in South Carolina and Washington State. Structured interviews were used to collect data. Logistic regressions and recursive partitioning classification and regression trees (CART analysis) identified predictors for pregnant women at high risk for substance use. Approximately 9% of the sample reported current use of either drugs or alcohol or both.

The regression results confirmed that past cigarette or alcohol use was significantly correlated with current drug or alcohol use. Furthermore, the effects of the various factors were cumulative; that is, women who had smoked and had ever used alcohol were 8 times more likely to use alcohol or drugs during pregnancy than women who had done neither. To refine the analysis and identify a small set of risk factors that could serve as the basis for a screening protocol for risk of alcohol or other drug use during pregnancy, a CART analysis was performed. Within the sample, the CART analysis generated three groups with increasing levels of risk for alcohol or illicit drug use during pregnancy:

- **Low risk** – those women who had never used alcohol: 1.4 % of women in the low-risk group reported using either drugs or alcohol or both during the time they had been pregnant
- **Average risk** – those women who had used alcohol in the past but not in the month before pregnancy: 8.7% of women in the average risk group reported using either drugs or alcohol or both during the time they had been pregnant
- **High risk** – those women who used alcohol in the month before pregnancy: 36% of women in the high risk group reported using either drugs or alcohol or both during the time they had been pregnant.

Entering cigarettes into the CART analysis, we found that the number of cigarettes smoked in the month before pregnancy helped to further distinguish the average risk and high risk groups. Of those women who had used alcohol in the past but did not smoke three or more cigarettes in the month before pregnancy, 3.4% reported using drugs during the time they had been pregnant. For those women who had used alcohol in the past and smoked three or more cigarettes in the month before pregnancy, 14.5% reported using drugs during pregnancy.

On the basis of these three levels of risk, we suggested that primary prenatal care providers could address three issues in the context of the health evaluation:

- Has the woman ever drunk alcohol?
- How much alcohol has the woman drunk in the month before pregnancy?
- How many cigarettes has the woman smoked in the month before pregnancy?

We integrated these three questions into the 4P's screening instrument developed by Ewing and field tested our new instrument, the 4P's Plus<sup>®</sup>, in a variety of settings and communities with over 100 physicians in Chicago, Illinois; Fresno, California; and East St. Louis, Illinois. Through this field testing, we learned:

- Physicians and other providers feel most comfortable if substance use screening can be incorporated into routine prenatal care and flows naturally within the context of the prenatal interview. Thus, we reversed the order of the questions in the Ewing's 4P's to make the P for Parents the first question and advised physicians to ask the question within the context of the family history. A positive response does not predict the woman's substance use, but it allows the provider to introduce the issue of substance use in a non-threatening manner that sensibly is included in the family history.
- The second P, for Partner, is similar to the first P, in that a positive response does not predict the woman's use of substances in pregnancy. However, a partner's alcohol or drug use was found to correlate with risk for domestic violence in the home.
- A positive response to the third P, for Past, placed the woman at low risk for alcohol use during pregnancy, an indication for prevention services to be instituted as part of primary prenatal care.
- The two questions related to the fourth P, for Present Pregnancy, were converted to open-ended questions in an attempt to obtain an answer that most truthfully reflected the woman's substance use patterns prior to pregnancy.
- Physicians and other providers, with training, gave strong support to the use of the 4P's Plus as a screening instrument.

Evaluation of clinical usefulness of the 4P's Plus<sup>®</sup> has shown successful outcomes. Through funding from the Maternal and Child Health Bureau, Access Family Health Network in Chicago, Illinois, initiated universal screening of pregnant women with the 4P's Plus in 1998. Access Community Health Network is a PHS 330 community health center network with 20 sites in medically underserved Chicago neighborhoods. Its prenatal care clinics operate in eight federally qualified health centers, a residential substance abuse treatment program, a hospital, and a community based health advocacy group. The target population for the universal screening was comprised of 80% African American and 20% Hispanic pregnant women. Within the target area, 40 percent of target area residents were under 185 percent of the poverty level at the time of the 1990 census. Medicaid or a Medicaid managed care plan covered nearly all the patients living in these community areas. Within one year, screening rates in the Access system went from 5% of women to 50% of women. For the past two years, screening rates with the 4P's Plus<sup>®</sup> have consistently remained at 95%. Among 1528 pregnant women screened with the 4P's Plus<sup>®</sup> in this time period, about 30% of the women needed further intervention for their alcohol or other drug use.

In 1999, Fresno County, California, instituted universal screening with the 4P's Plus<sup>®</sup> for pregnant women in its health care system. Since that time, the number of Medicaid eligible pregnant women being referred into substance abuse treatment has gone from 5% of women to 50% of women. For the past two years, screening rates with the 4P's Plus<sup>®</sup> have consistently remained at 95%. Among 1528 pregnant women screened with the 4P's Plus<sup>®</sup> in this time period, about 30% of the women needed further intervention for their alcohol or other drug use.

Substance abuse screening assessment data developed in three very different communities utilizing the 4P's Plus show a consistent story."<sup>10</sup>

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- <sup>1</sup> Ewing, H. (1990). *A practical guide to intervention in health and social services, with pregnant and postpartum addicts and alcoholics*. The Born Free Project.
- <sup>2</sup> Kennedy, C., Finkelstein, N., Hutchins, E., Mahoney, J. (2004) *Improving Screening for Alcohol Use During Pregnancy: The Massachusetts ASAP Program*, *Maternal and Child Health Journal*, 8(3), 137-147)
- <sup>3</sup> Ewing, H. (1990). *A practical guide to intervention in health and social services, with pregnant and postpartum addicts and alcoholics*. The Born Free Project.
- <sup>4</sup> Bresnahan, K.; Zuckerman, B.; and Cabral, H. (1992) *Psychosocial correlates of drug and heavy alcohol use among pregnant women at risk for drug use*. *American Journal of Obstetrics and Gynecology* 80 (6): 976-980.
- <sup>5</sup> Center for Substance Abuse Prevention (CSAP), Division of Demonstrations for High-Risk Populations (1993). *Pregnancy and exposure to alcohol and other drug use: CSAP technical report 7* (DHHS Publication No. SMA 93-2040). Washington, DC: U. S. Government Printing Office.
- <sup>6</sup> Svikis, D., Henningfield, J., Gazaway, P. (1997). *Tobacco Use for Identifying Pregnant Women at Risk of Substance Abuse*. *The Journal of Reproductive Medicine*. (42)299-302.
- <sup>7</sup> Ebrahim, S.H., Decoufle, P., Palakathodi, A.S. (2000). *Combined Tobacco and Alcohol Use by Pregnant and Reproductive-aged Women in the United States*. *American Journal of Obstetrics and Gynecology*. 96(5)767-771.
- <sup>8</sup> Watson, E., Barnes, H., Brown, E. Kennedy, C. & Finkelstein, N. (2003) *Alcohol Screening Assessment in Pregnancy: The ASAP Curriculum*. Institute for Health and Recovery, Cambridge, MA.
- <sup>9</sup> Chasnoff I, et al. (2001). *Screening for substance use in pregnancy*, *American Journal of Obstetrics and Gynecology*, 184:752-758
- <sup>10</sup> *Research Basis of the 4P's Plus*©, <http://www.childstudy.org/nti/4pp/research/>, Accessed on March 21, 2005