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Background

Alcohol consumption during pregnancy is the leading cause of preventable neurocognitive disability in the USA. Alcohol also contributes to increased sexual risk taking. Women attending STD clinics likely constitute a population at high risk for an alcohol-exposed pregnancy (AEP).

Objective

To evaluate the feasibility of reducing AEP risk in women attending STD clinics, using the CHOICES intervention.

Methods

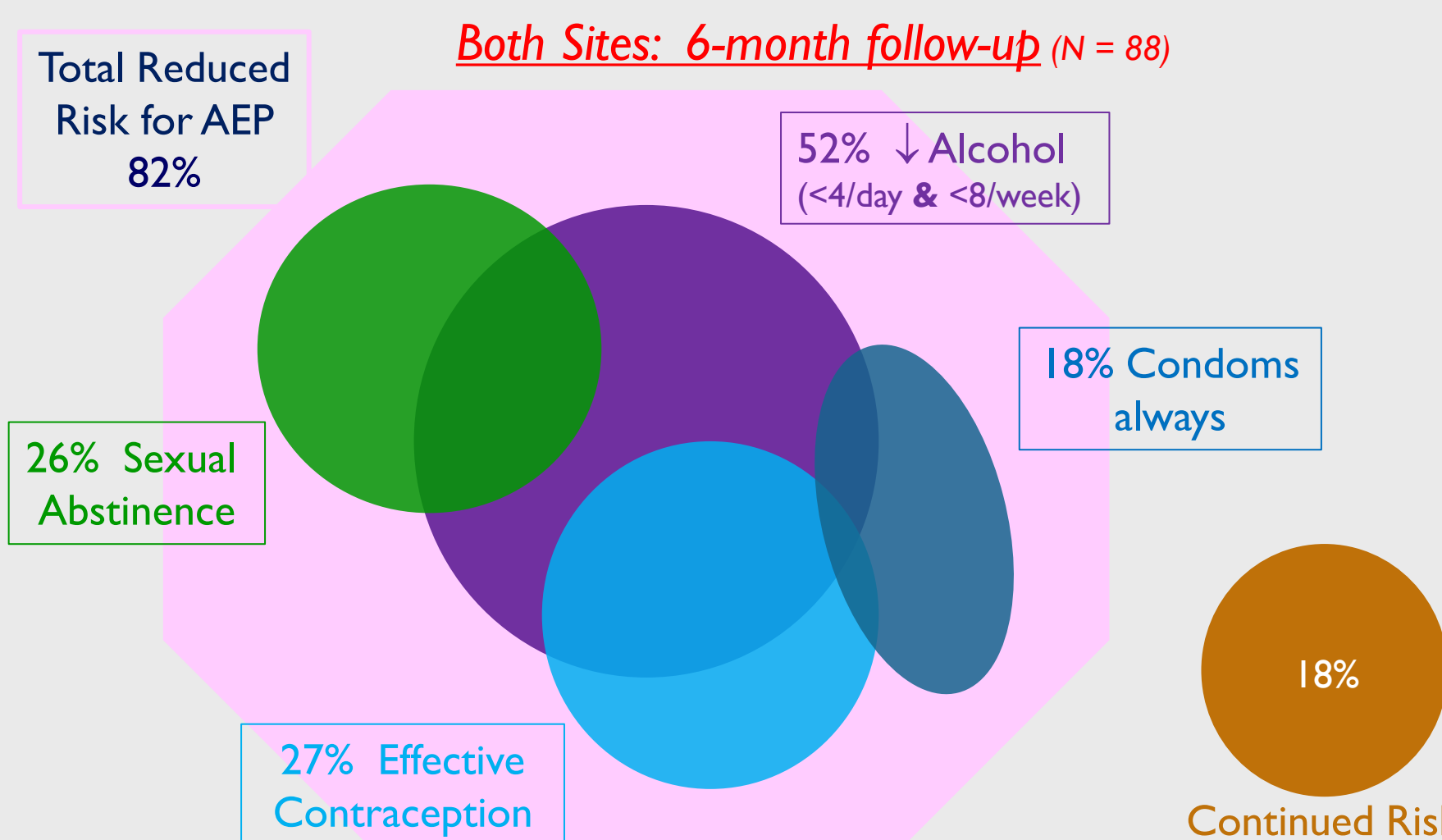
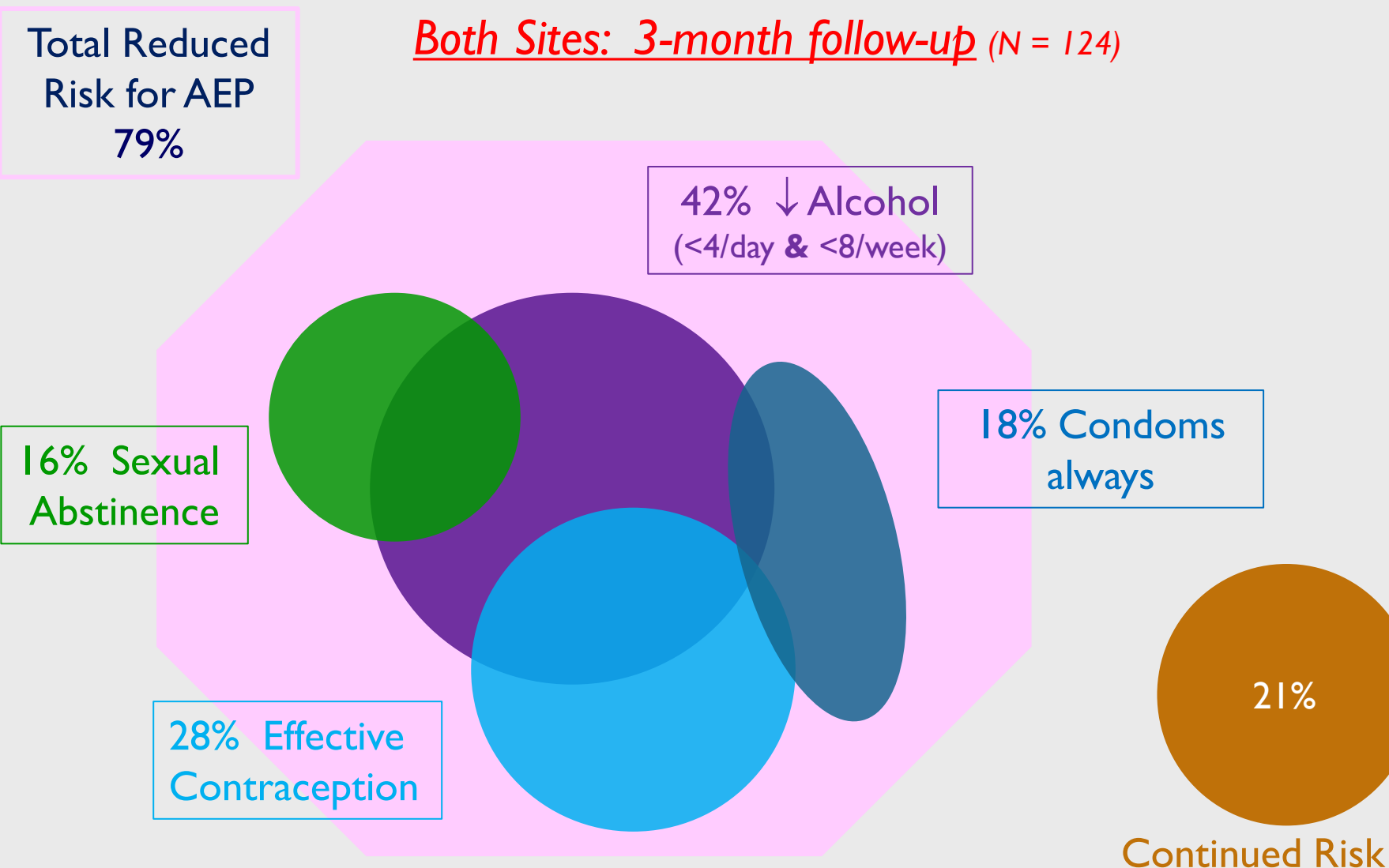
During 16 months (9/2010 – 12/2011), two STD clinics (in Baltimore and Denver) screened visits for eligible women: heterosexually active, aged 18 - 44, not using effective contraception, and drinking alcohol at high-risk levels (>3 standard drinks on one occasion or >7 in one week), during the last three months. At-risk women were offered the CHOICES intervention, consisting of two motivational interviewing-based sessions with a trained interventionist, to explore contraceptive and alcohol use. Free family planning (FP) visits were offered to participants. The Denver clinic is an integrated STD/FP clinic while Baltimore's STD clinic referred to a separate FP clinic. Women were re-interviewed about contraceptive and alcohol use for the preceding 30 days, at 3 and 6 months (both sites), and 9 months (Denver) after the first session. Reduced risk for AEP was defined as: drinking below high-risk levels; and/or using effective contraception; condom use always; abstinence from sex.

Results

9162 female visits were conducted during this time, with 6860 (75%) receiving screening. 973 (14%) met all eligibility criteria. Of eligible women, 306 (31%) enrolled; 240 of those (78%) stayed or returned for session 1, and of those, 142 (59%) returned for session 2 and 127 (53%) attended a family planning visit. Of women reaching the follow-up windows, rates of reduced AEP risk at 3 and 6 months were 79% (61/87) and 82% (35/51). In Baltimore 82% of women were Black/African-American and 5% Hispanic, with 40% age 18-24 yo, 44% 25-34 yo and 13% 35-44 yo. In Denver 63% were White, 16% Black/African-American and 40% Hispanic, with 53% age 18-24 yo, 41% 25-34 yo and 6% 35-44 yo. 3-month follow-up was gotten in 124 women (68 Baltimore, 56 Denver), 6-month in 88 women (57 Baltimore, 31 Denver), and 9-month in 26 women (Denver).

Risk Reduction Strategies Used by Women Receiving Intervention

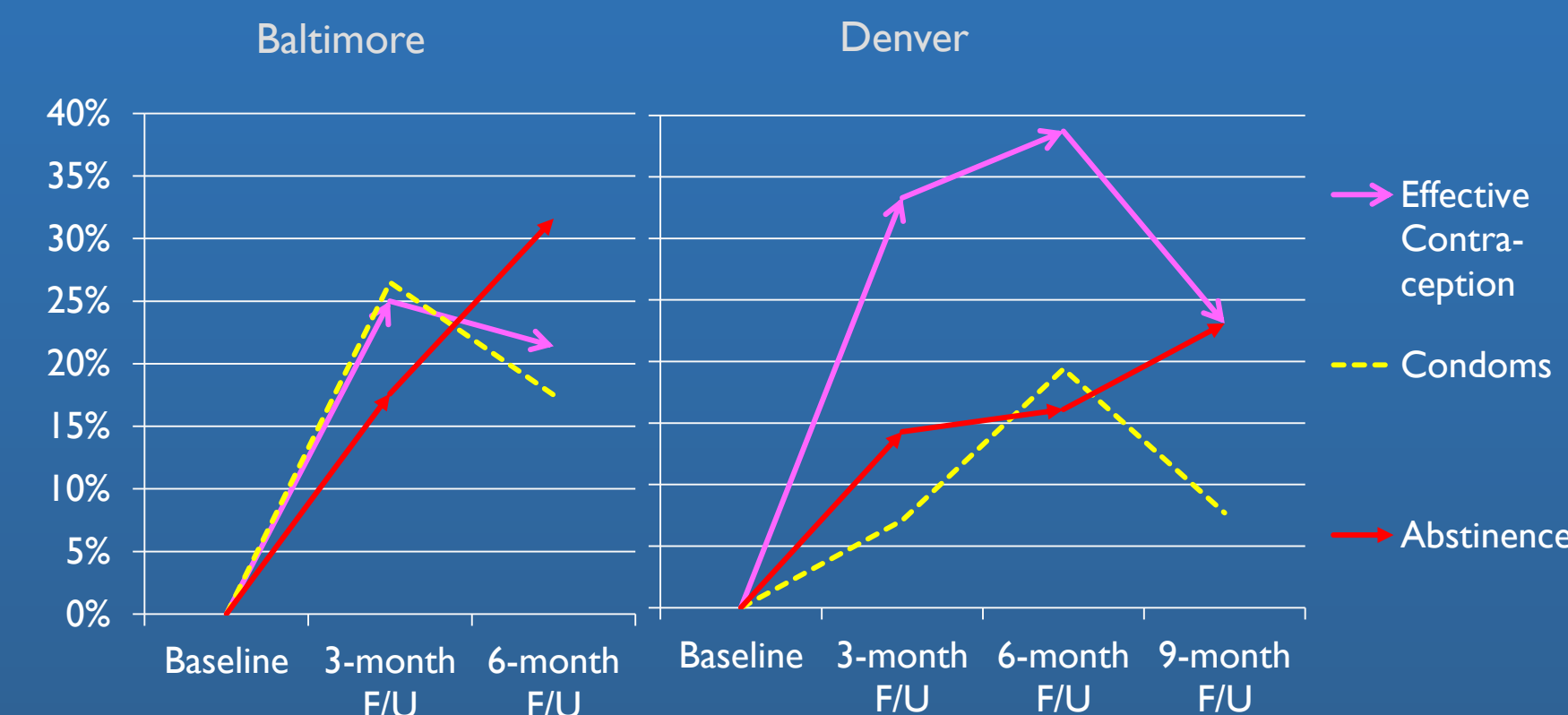
Venn Diagrams Showing % of Women Adopting Each Strategy and Overlap in Use of Multiple Strategies



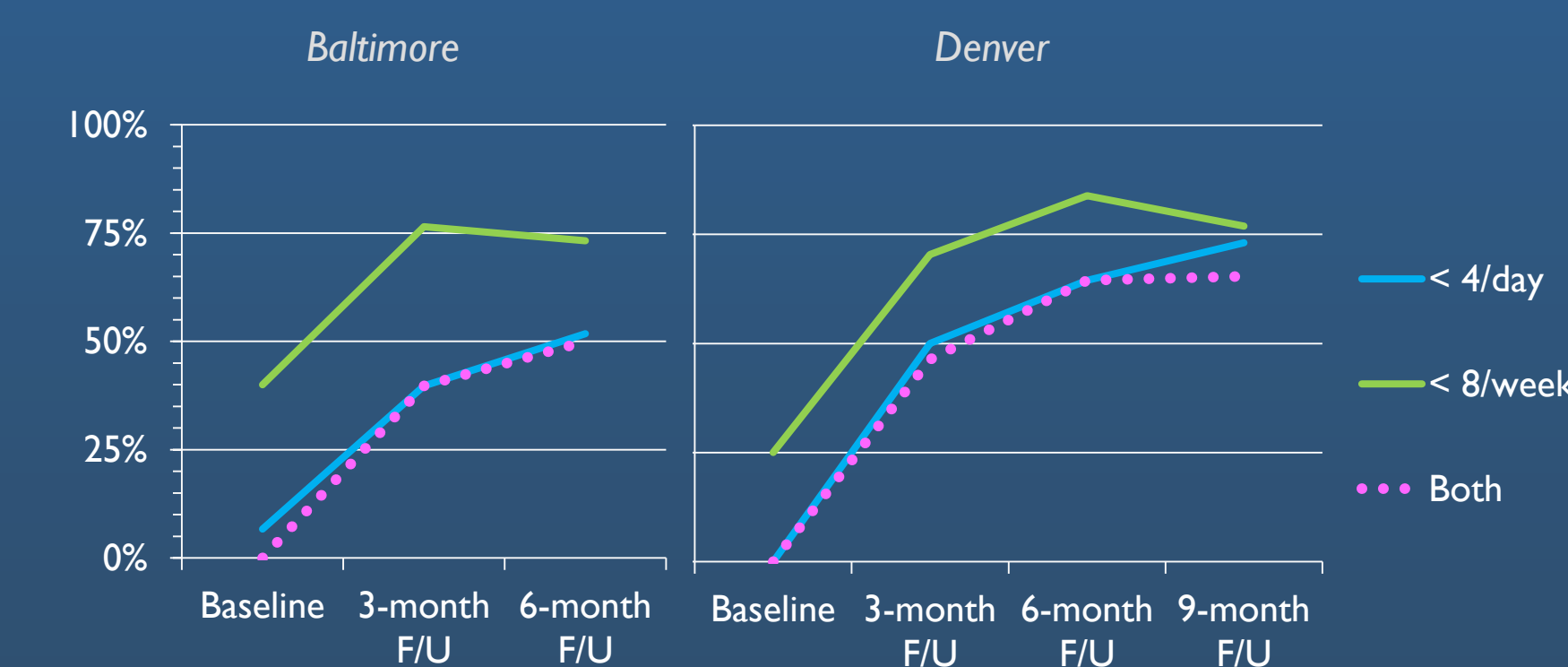
Results, cont.

Both condoms and abstinence were chosen more in Baltimore than Denver, while effective non-condom contraception was chosen more in Denver. Women in both sites had a median of 3 binge days/month, but the Interquartile Range (IQR) for Baltimore was much larger than for Denver (IQR 1-12 vs. 2 - 5). Baltimore had a lower median and IQR for typical drinks/week than Denver (median 9, IQR 3-15 vs. 12, 7-28).

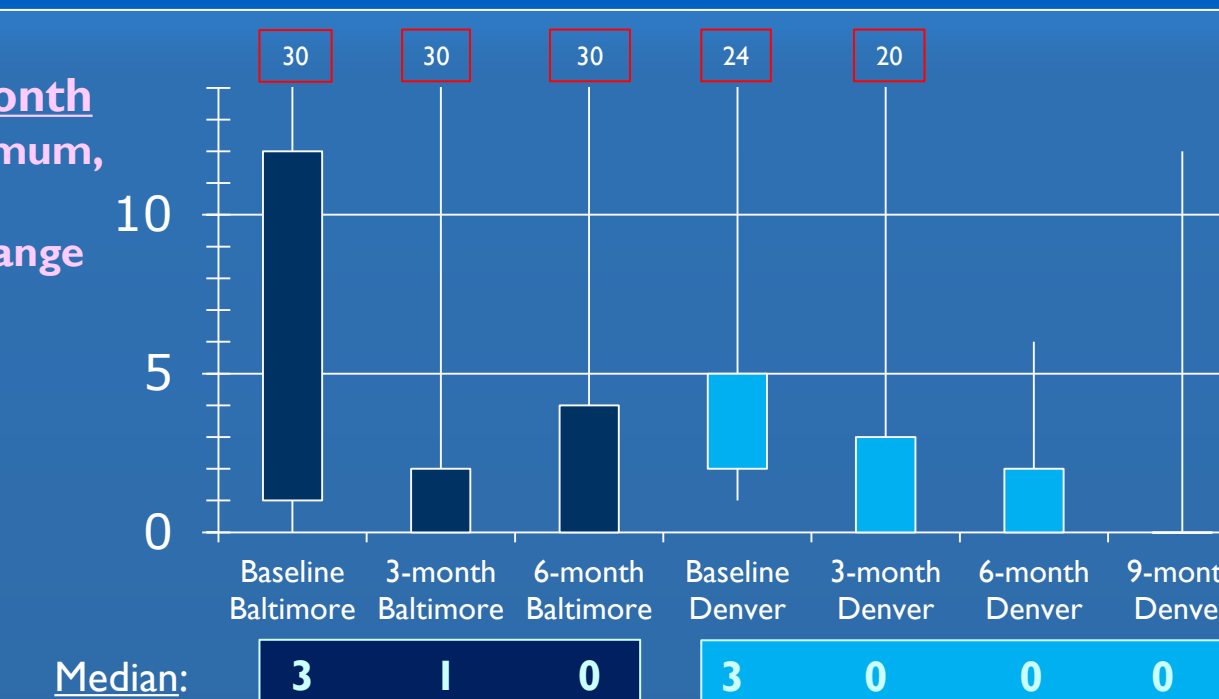
% of Women Choosing Effective (non-condom) Contraception, Condoms (always), or Abstinence



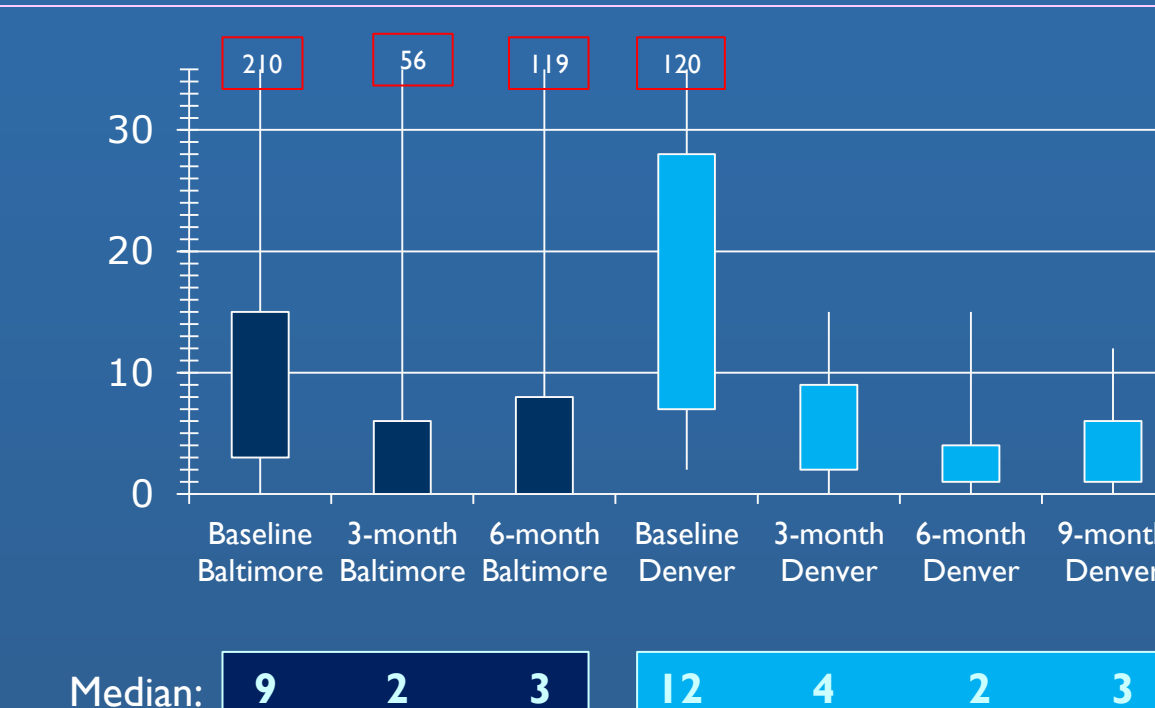
% of Women Drinking Below High-Risk Levels



Binge Days/Month Maximum, Minimum, Median & Interquartile Range



Typical Drinks/Week Maximum, Minimum, Median & Interquartile Range



Conclusions

1. Women entering the intervention had reduced risk for AEP on follow-up.
2. Rates were similar at both clinics, but the ways women chose to lower risk differed, with more women in Baltimore choosing abstinence and condom use, and more women in Denver choosing reduced alcohol and effective contraception.
3. Baseline drinking patterns differ between the sites, with women in Baltimore having more binge days but women in Denver drinking more drinks on drinking days.
4. Preliminary data, limited by small numbers, suggest that adherence to the new behaviors does drop some by 9 months after the intervention.

Implications

STD clinics can effectively screen for women at risk for AEP, which is common in this population. The CHOICES intervention can motivate behavior change that lowers the risk for AEP.