



Causes of Increased Donor Deferral Rates in a Mid-Western Blood Center: 2004 to 2006

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Background – 1 of 2

- Over the last few years there have been many changes in blood donor qualification criteria with little assessment of the impact of these changes.
- Objective - to identify & explain changes in deferral rates between 2004 and 2006
- A database was developed showing categories and rates of blood donor deferrals for a mid-western blood center for 2004 to 2006.

Background – 2 of 2

- 32 deferral variables were ID'ed: 8 for vital signs & 24 for health histories
- 4 potentially confounding factors were ID'ed: (1) a new device for BP and pulse measurement was deployed 10/05, (2) 1st Q 05 the center upgraded to newest version of AABB Uniform Donor History Questionnaire (UDHQ), (3) 1st Q 05 center extended automated UDHQ processing to all donors and collections sites (mobile and fixed), and (4) fall 2005 center extended its collection area.

Methods

- Donor UDHQ health histories mostly (all in 2005 & 2006) via multimedia Quality Donor System™ - an audio visual touch screen computer assisted self interviewing system (AVT-CASI)
- The UDHQ in use at the center prior to 2005 consisted of 61 questions on donor medical and behavioral histories; the upgraded version introduced in the first quarter of 2005 consisted of 49 questions.

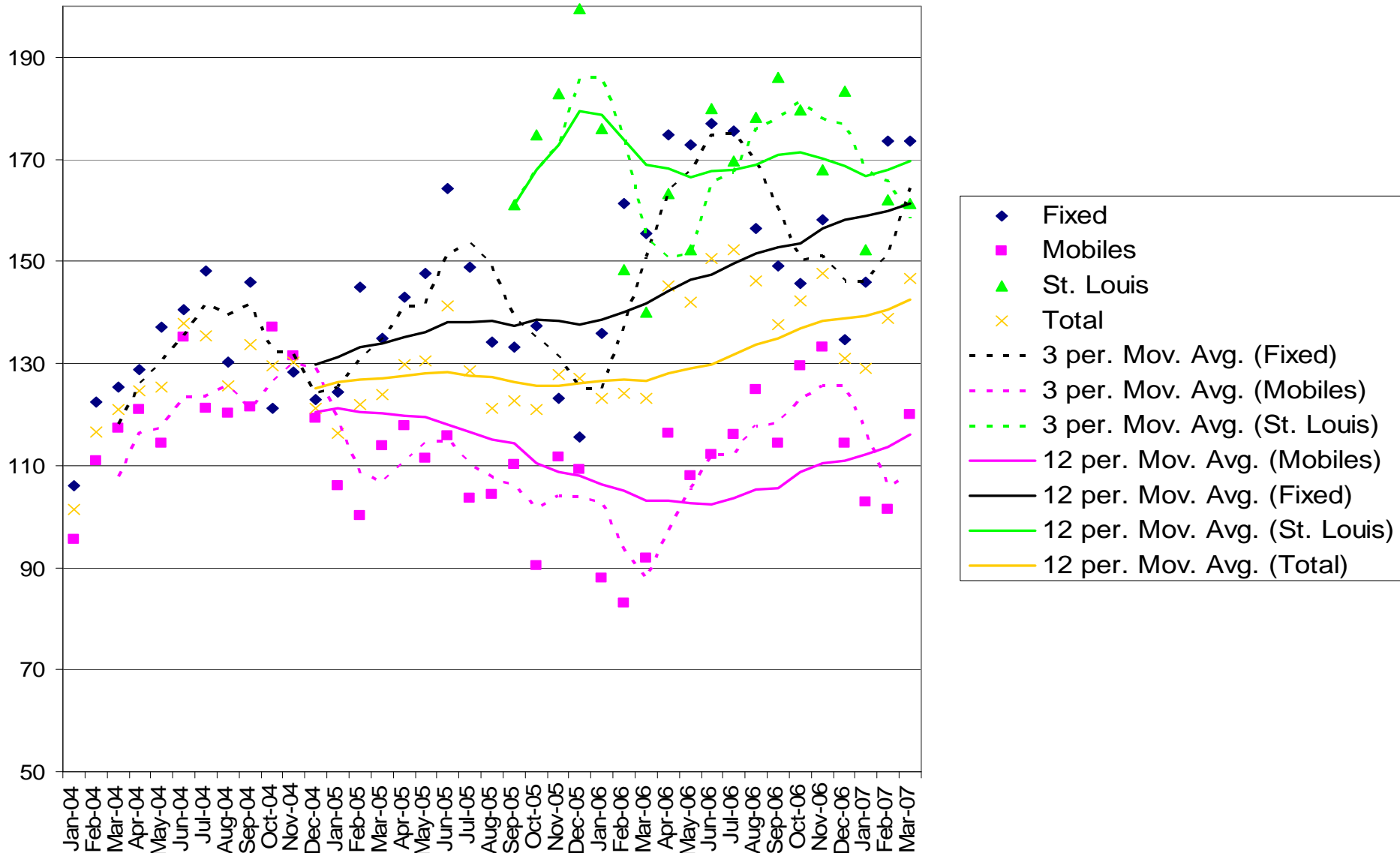
Results 1 of 3

- Overall there was a significant increase in deferral rates during the study period.
- In 2004 the mean of the percentage of donors deferred was 12.08 (SD=0.95);
- In 2005 it was 12.51 (SD=0.64); and
- In 2006 13.52 (SD=1.09).
- The increase in deferral rates between 2004 and 2005 was not statistically significant but increases in rates between each of the earlier two years and 2006 were statistically different ($p < .002$)

Results 2 of 3

- Among the 7 vital signs variables, 4 were statistically different: temperature, high blood pressure, high pulse and high hematocrit.
- Of the 25 history variables 6 were statistically different: poor health, AIDS high risk, doctor's care minor, major surgery, heart disease/heart attack and irregular pulse.

Deferrals/1000 Donors Presented



Conclusion

- The statistically significant increases in donor deferral rates occurring between 2004 or 2005 and 2006 were attributable, in part, to changes in 4 vital signs and 6 history variables.
- Further study is needed to determine if other factors including full automation of donor screening and expanded geographical area to include a new and possibly higher risk population also contributed to the increases.

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