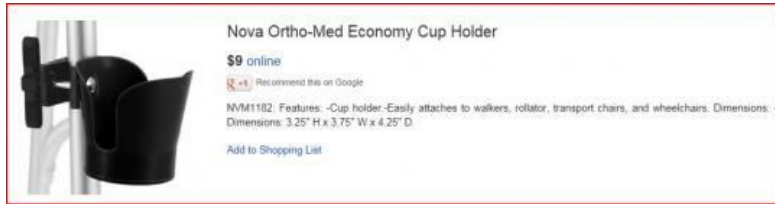


Element F: Consideration of design viability

Market Analysis

For the time constraints we were given, our market analysis has to be based on current products available that perform in a similar manner as ours, but don't meet our design specifications. As previously noted, the following three ideas are current products available on Amazon.com :



<http://www.amazon.com/Nova-Ortho-med-Ch-2000-Economy-Holder/dp/B003ZSCFZM>



http://www.walgreens.com/store/c/nova-cup-holder/ID=pod1362928-product?V=G&ext=frgl_Google_Home_Medical_Supplies_&Equipment



<http://www.amazon.com/Cup-Holder-Wheelchair-Cane-Walker/dp/B000P3KLLK>

Based on our discussions with individuals on crutches, our team is confident that this product could be brought to the current market, and it would be purchased by consumers. We possibly could market this as a small pamphlet, to be given to users when they are issued their crutches. It could be distributed right at the hospital clinic, or could be purchased at Medical supply stores, Walgreens, Walmart, or even on line.

There are some existing products for wheelchairs and walkers that are priced at \$9.00 - \$15.00 (see images above.) If our product was priced in this range we feel it would be affordable. All three of these products have over 15000 customer ratings on Amazon.com that average 4.5 stars out of 5. None of these are adaptable for crutches.

We believe there is a large potential market for our design. Our interviews with our physical

therapist support this, along with a report done by Kaye, Kang, and LaPlante, indicating that the number of people using mobility devices has been increasing. Crutch use alone has increased by 14% over the last few years¹. This is much greater than what can be attributed to the aging population (Russell, Hendershot, Leclerc, Howie, and Adler, 1997). An additional factor in this growth can be credited to increasing survival rates of trauma patients. The authors also state that 6.8 million Americans living outside of institutions use mobility assistance devices, and 566,000 of them are using crutches.¹

The increase in crutch use as a mobility device is further substantiated by The Journal of Gerontology: Social Sciences (vol. 56, no. 6, 2001).² In Wisconsin alone 5% of residents living at home have a physical disability³ With this increase use of crutches, comes a demand for crutch-related products, that can increase the patient's independence.

¹ Kaye, H. Stephen, Taewoon Kang, and Mitchell P. LaPlante. "UCSF - Disability Statistics Center - Publication - Report 14." UCSF - Disability Statistics Center - Publication - Report 14. N.p., June 2000. Web. 22 June 2012. http://dsc.ucsf.edu/publication.php?pub_id=2 (http://dsc.ucsf.edu/publication.php?pub_id=2)

² Allen, S. M., A. Foster, and K. Berg. "Use of Mobility Equipment Among the Mobility Impaired." Lecture. Annual Meeting of Gerontological Society of America. San Francisco, CA. Nov. 1999. Study Finds Canes, Crutches and Wheelchairs Greatly Reduce Need for Human Help. Robert Wood Johnson Foundation. Web. 20 June 2012. <<http://www.rwjf.org/reports/grr/034188.htm>> (<http://www.rwjf.org/reports/grr/034188.htm>)

³ "1999-2001 Biennial Report", Wisconsin Department of Public Instruction Homepage. Wisconsin Family Health Survey, 1998. Web. 19 June 2012. <<http://dpi.wi.gov/pld/pdf/sn06.pdf>> (<http://dpi.wi.gov/pld/pdf/sn06.pdf>)