

## Progress Report Week 14: Week of April 23<sup>rd</sup> to April 29<sup>th</sup> 2008

### Device to Assist in Removal of Pills from Bubble Wrapped Packaging

**Client:** Dr. Molly Carnes MD, MS, Professor, UW Center for Women's Health Research  
**Advisor:** Professor Brenda Ogle, Ph.D.  
**Team:** Benjamin Engel, Leader  
Ryan Carroll, Communicator  
Eric Printz, BWIG  
Justin Schmidt, BSAC

### Problem Statement

Patient safety issues involving the improper use of medication has lead to packaging of over the counter drugs that is increasingly difficult to access. This type of packaging is referred to as blister pack or bubble wrap style packaging and it is especially challenging for elderly patients with decreased hand strength or others with hand weaknesses or deformities. These difficulties lead struggling patients to alternative access methods that are often dangerous. It has been proposed to design a device capable of aiding patients in the removal of over-the-counter medication from bubble wrap style packaging.

### Week 14 Goals

- Finalize and fine tune device
- Design and run tests using the device
- Begin making poster for presentation

### Week 14 Activities

Team Member	Accomplishments	Hours	Running Total (Hours)
<b>Benjamin Engel</b>	Prototype construction, fine tuning, poster	4	41.5
<b>Ryan Carroll</b>	Detailed fine tuning, prototype construction, poster, edited paper	5	40
<b>Justin Schmidt</b>	Prototype construction, testing, poster printing	3.5	42
<b>Eric Printz</b>	Prototype construction, testing, poster, paper	5	40.5

### Week 14 Accomplishments

- Finalized prototype construction and fine tuned for optimum performance
- Ran tests to determine success rate, number of pills damaged, and amount of damage per damaged pill
- Finished poster for presentation
- Began writing final report

## Week 15 Goals

- Final presentations
- Present prototype and expenses to client
- Edit and finalize final design report

## Schedule

Scheduled
Completed

	1/23	1/30	2/6	2/13	2/20	2/27	3/5	3/12	3/19	3/26	4/2	4/9	4/16	4/23	4/30	5/7
Propose project																
Conduct background research																
Discuss parameters w/ client																
Develop PDS																
Brainstorm design ideas																
Design alternatives/matrix																
Midsemester presentation																
Midsemester paper																
Finalize design ideas																
Order materials																
Construct prototype																
Test prototype																
Plan final poster presentation																
Write final paper																
Final advisor meeting																

## Project Difficulties

- No difficulties to report this week

## Expenses:

Part	Distributor	Cost
Sugatsune AR2-100 ball bearing drawer slide (2)	Alema Inc. www.alema.com	\$39.46
Acrylic plastic sheet (18" by 36" by 3/8")	West Bend Glass	\$21.12
Metal sheet (8" by 30" by 1/8")	Neu's Hardware	\$12.00
Metal sheet (18" by 24" by 1/32")	Neu's Hardware	\$8.00
Hardware (nuts, bolts, washers), epoxy (2), wooden dowel, hinges	Ace Hardware	\$6.32 + \$9.58 + \$2.18 + \$9.74 + \$9.31

Rubber sheeting, polymer pads to prevent sliding of device	Menards	\$5.45
Dell computer rubber strap		\$5.00
Pills for testing	Walgreens	44.55
<b>Total</b>		<b>172.71</b>

	Estimated Cost
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