**Sinclair Community College**

**Continuous Improvement Annual Update 2012-13**

**Please submit to your dean and the Provost’s Office no later than Oct. 1, 2012**

**Department:** 0666 – Emergency Medical Services

Year of Last Program Review: FY 2008-2009

Year of Next Program Review: FY 2015-2016

**Section I: Department Trend Data, Interpretation, and Analysis**

**Degree and Certificate Completion Trend Data – OVERALL SUMMARY**

Figure 1: Original Degree and Certificate Completion Trend Data

Degree and Certificate Completion Trend Data – Overall Summary (Recalculated)

Please provide an interpretation and analysis of the Degree and Certificate Completion Trend Data (Raw Data is located in Appendix A*): i.e. What trends do you see in the above data? Are there internal or external factors that account for these trends? What are the implications for the department? What actions have the department taken that have influenced these trends? What strategies will the department implement as a result of this data?*

The interpretation of the above data is problematic. This data reveals a downward success rate over the past 4 years. The data is flawed. There should be more variability within the data based on at least enrollment changes. Using the following sources, I recalculated the department’s success rate.

* Dawn reports for degree completion.
* EMS department database. The EMS department is required to track all licensure level students who are eligible for state testing and eventual practice.
	+ EMT-Basic (EMS 117/118) and Paramedic (EMS 135-139).
* See amended Appendix A (now called Table 1).
* Updated success rates are now displayed in Figure 2 (this page).
* To understand the success rate, it is important to compare this data with enrollment trends for the department. Please see Figure 3 on page 3.

**Table 1– Program Completion and Success Rate Data**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Department | Department Name | Program | FY 07-08 | FY 08-09 | FY 09-10 | FY 10-11 | FY 11 - 12 |
| 0666 | Emergency Medical Services | EBST.STC | 291 | 239 | 225 | 161 | 108 |
| EMT Basic Accreditation Data: Number of successful students | 179 | 233 | 258 | 189 | 131 |
| 0666 | Emergency Medical Services | EMSFO.AAS | . | . | 5 | 5 | 7 |
| 0666 | Emergency Medical Services | EMSVS.AAS | . | 1 | 1 | 3 | 1 |
| 0666 | Emergency Medical Services | EPST.STC / EPST.CRT | 132 | 109 | 85 | 59 | 83 |
| EMT Paramedic Accreditation Data: Number of successful students | 76 | 108 | 88 | 81 | 92 |
| TOTALS | 255 | 342 | 352 | 278 | 231 |

**Degree and Certificate Completion**

*(Data updated on 09/15/12 – data from Dawn Degree Completion Five Year Trend Report and from EMS department pass rate database. When creating Figure 2 of this report, areas not highlighted were ignored.*

Figure 2: EMS Department Recalculated Degree and Certificate Completion Trend Data

Figure 3: EMS Department FTE Enrollment

Unemployment: > 8.5%

Recession

1. What trends do you see in the above data?
	1. The department enrollment has been relatively stable until the beginning of the recession. Enrollment then increased, peaking after the recession officially ended. At this time statewide unemployment continued to remain higher than desired.
		1. The department is 27% larger today as compared to its size pre-recession (as measure by FTE).
		2. The department has had no changes within its fulltime faculty or reassigned time allotments within this time frame (2007-2012).
		3. The majority of the FTE is generated by the EMT and Paramedic licensure level courses. Degree courses contribute very little.
	2. Departmental success rates were influenced by changes in enrollment. These changes are not absolutely proportional, therefore other forces are impacting departmental success.
		1. The EMT program is a large portion of the FTE load generated by the department. In Spring of 2012, EMT courses accounted for 40% of FTE generated (EMS 117/EMS 118).
		2. Since the implementation of the latest version of the National EMS Education Standards in Winter of 2011, attrition has increased within the EMT courses.
			1. See Table 2: EMT Basic Pass Rates.
				1. Note the increase in first time and aggregate pass rates since implementation of new curriculum.
				2. This indicates that though attrition has climbed, the successful student is very likely to pass state exams.
			2. See Table 3: EMT Basic Attrition Rates

**Table 2: EMT-Basic Pass Rates**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Cohort** | **Graduate Size** | **None Testing Graduates** | **First Time Pass Rate** | **Aggregate Pass Rate** |
| **Fall 2007** | 60 | 8 (13%) | 46 (89%) | 50 (96%) |
| **Winter 2008** | 57 | 9 (16%) | 45 (94%) | 47 (98%) |
| **Spring 2008** | 51 | 2 (4%) | 41 (84%) | 44 (90%) |
| **Summer 2008 (A/C Term)** | 18 | 1 (6%) | 15 (88%) | 16 (94%) |
| **Fall 2008** | 59 | 6 (10%) | 43 (81%) | 50 (94%) |
| **Winter 2009** | 76 | 10 (13%) | 56 (85%) | 63 (96%) |
| **Spring 2009** | 79 | 9 (11%) | 56 (80%) | 59 (84%) |
| **Summer 2009 (A/C Term)** | 47 | 5 (11%) | 37 (88%) | 39 (93%) |
| **Fall 2009** | 91 | 21 (23%) | 48 (69%) | 57 (81%) |
| **Winter 2010** | 75 | 11 (15%) | 46 (72%) | 54 (84%) |
| **Spring 2010** | 45 | 4 (9%) | 32 (78%) | 33 (81%) |
| **Summer 2010 (A/C Term)** | 47 | 4 (9%) | 35 (81%) | 40 (93%) |
| **Fall 2010** | 70 | 10 (14%) | 44 (73%) | 50 (83%) |
| **Old Curriculum Totals** | **775** | **100 (13%)** | **544 (81%)** | **602 (89%)** |
| **National Comparables** |  |  | **65%** | **79%** |
| **IMPLEMENT CURRENT NATIONAL EMS EDUCATION STANDARDS** |
| **Winter 2011** | 37 | 2 (5%) | 34 (97%) | 34 (97%) |
| **Spring 2011** | 35 | 4 (11%) | 30 (97%) | 31 (100%) |
| **Summer 2011 (A/C Term)** | 22 | 3 (14%) | 15 (80%) | 15 (80%) |
| **Fall 2011** | 29 | 2 (7%)  | 25 (93%) | 26 (96%) |
| **Winter 2012** | 57 | 7 (14%) | 46 (92%) | 47 (94%) |
| **Spring 2012** | 23 | 3 (13%) | 20 (100%) | 20 (100%) |
| **Summer 2012** | 7 | 1 (14%) | 5 (83%) | 6 (100%) |
| **New Curriculum Totals** | **210** | **22 (10%)** | **175 (93%)** | **179 (95%)** |
| **National Comparables** |  |  | **70%** | **79%** |

*Source: National Registry Online Database (*[*www.nremt.org*](http://www.nremt.org)*). Updated 09/17/12*

**Table 3: EMT-Basic Attrition Rates**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Subsidy Enrollment** | **In Cycle Course Completion Enrollment** | **Attrition Rate** |
| **EMT-Basic** |  |  |  |
| 2000-2001 | 200 | 146 | 27% |
| 2001-2002 | 267 | 151 | 43% |
| 2002-2003 | 289 | 176 | 39% |
| 2003-2004 | 335 | 207 | 38% |
| 2004-2005 | 292 | 160 | 45% |
| 2005-2006 | 286 | 165 | 42% |
| 2006-2007 | 289 | 121 | 58% |
| 2007-2008 | 333 | 186 | 44% |
| 2008-2009 | 471 | 261 | 45% |
| 2009-2010 | 476 | 227 | 52% |
| **IMPLEMENT CURRENT NATIONAL EMS EDUCATION STANDARDS****Winter 2011** |
| 2010-2011 | 432 | 164 | 62% |
| 2011-2012 | 289 | 116 | 60% |
| 2012-2013 | 78 (Fall 12) |  |  |
| **Totals** | **3959** | **2080 Average** | **47%** |

*Source: EMS Department NREMT Pass Rate database.*

1. Are there internal or external factors that account for these trends?
	1. The recent recession and anemic employment market have had an impact on enrollment. It appears that as employment improved, FTE decreased as less people were seeking education.
	2. Local Hiring
		1. Dayton Fire Department recently conducted hiring opportunity. Estimates are nearly 2000 individuals were present. Of those, estimates are over half were fully trained as fire fighter / EMT’s or fire fighter/paramedics. These individuals are vying for less than 50 positions.
		2. Cincinnati Fire Department recently conducted hiring opportunity. Estimates are nearly 4000 individuals were present. Of those, estimates are over half were fully trained as fire fighter / EMT’s or fire fighter/paramedics. These individuals are vying for less than 90 positions.
		3. The market continues to be saturated with EMS providers.
	3. Approximately 16% of all paramedic within the state of Ohio are created at Sinclair. Approximately 13% of all EMT’s within the state of Ohio are created at Sinclair.
	4. The department is currently very large as compared to others within the state. Increasing the size of the department would be difficult in the long term.
		1. Local hiring does not reflect a need to increase size as the market place is currently saturated within EMS providers.
		2. Anecdotally, approximately 10% of all paramedic students leave Ohio shortly after graduating.
2. What are the implications for the department?
	1. EMT Program.
		1. Enrollment in this one quarter (semester) course skyrocketed during 2009-2010. This course was attractive because it could get an individual a marketable skill in a very short time. Enrollment is back to pre-recession levels.
		2. Individuals who entered into this course may not have been ready for the academic rigor needed to be successful.
			1. There is no data currently being reviewed that demonstrates that this group of students was different (2008-2010) are statistically different than the “typical” EMT student.
	2. Paramedic Program
		1. With the implementation of semester curriculum, there will be changes in enrollment, attrition and potentially pass rate data.
			1. Bio 1107 is now a prerequisite for entry into the paramedic program. Enrollment for the Fall 2012 cohort was 45. This is compared to typical Fall cohorts of 70-90 students (see table 4).
			2. It is assumed that attrition should decrease for this group as the BIO 1107 becomes a gatekeeper course.
		2. New curriculum and new delivery format will also affect program success. It is hoped that increased time practicing skills, more time working in smaller groups within the laboratory setting and consistent faculty contact within the clinical setting will all have positive effects on attrition and success.
3. What actions have the department taken that have influenced these trends?
	1. Attrition within the EMT courses (EMS 1150 and EMS 1155) has been higher than desired since Winter 2011.
		1. The comprehensive final for this course was changed. The exam was retooled to create a more criterion referenced exam. Accordingly, the scores awarded for the exam were changed to more accurately reflect a competency based exam
			1. Pass the test first time (regardless of score) and receive 100% for 40% of their EMS 1150 grade.
			2. Pass the test the second time and receive 93% for the 40% of their EMS 1150 grade.
	2. Course length is also felt to potentially have an impact. With the course now offered within a 16 week time frame, it is hoped that the increase time will translate to increased success.
4. What strategies will the department implement as a result of this data?
	1. Continue to track data (pass rates, attrition, and success) for licensure level courses.
	2. Enrollment will decrease (as compared with projected Fall 12 and Spring 13. With the conversion into semesters, the department did not enroll a Spring 12 paramedic cohort. This translates into decreased paramedic students within the pipeline. It will take until Fall 2013 until we have 3 cohorts within the system.

**Course Success Trend Data – OVERALL SUMMARY**

Figure 4: EMS Department Overall Success Rate

Please provide an interpretation and analysis of the Course Success Trend Data (Raw Data is located in Appendix A). Looking at the success rate data provided in the Appendix for each course, please discuss trends for high enrollment courses, courses used extensively by other departments, and courses where there have been substantial changes in success.

The slight drop in success within the EMS department has compared to other departments on campus can at least partially be explained by the increase in attrition of the EMT program. See above discussion in Degree and Certification Completion Success Data.

Please provide any additional data and analysis that illustrates what is going on in the department (examples might include accreditation data, program data, benchmark data from national exams, course sequence completion, retention, demographic data, data on placement of graduates, graduate survey data, etc.)

**Table 4: EMS Department Attrition**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Subsidy Enrollment** | **In Cycle Course Completion Enrollment** | **Attrition Rate** |
| **First Responder (Emergency Medical Responder EMS 1100)** |  |  |  |
| 2000-2001 | 8 | 7 | 13% |
| 2001-2002 | 19 | 18 | 5% |
| 2002-2003 | 0 | 0 | No Students |
| 2003-2004 | 5 | 4 | 20% |
| 2004-2005 | 5 | 5 | 0% |
| 2005-2006 | 12 | 12 | 0% |
| 2006-2007 | 0 | 0 | No Students |
| 2007-2008 | 0 | 0 | No Students |
| 2008-2009 | 0 | 0 | 0 |
| 2009-2010 | 8 | 6 | 25% |
| 2010-2011 | 3 | 3 | 0% |
| 2011-2012 | 6 | 5 | 17% |
| **Totals** | **66** | **60 Average** | **9%** |
|  |  |  |  |
| **Paramedic (EMS 2100 series) Starting Term** | **Subsidy Enrollment** | **In Cycle Course Completion Enrollment** | **Attrition Rate** |
| 2000-2001 | 110 | 54 | 51% |
| 2001-2002 | 126 | 76 | 40% |
| 2002-2003 | 109 | 73 | 33% |
| 2003-2004 | 134 | 87 | 35% |
| 2004-2005 | 132 | 74 | 44% |
| 2005-2006 | 141 | 61 | 57% |
| 2006-2007 | 139 | 76 | 45% |
| 2007-2008 | 155 | 108 | 30% |
| 2008-2009 | 157  | 88 | 44% |
| 2009-2010 | 158  | 81 | 49% |
| 2010-2011 | 149 | 93 | 38% |
| 2011-2012 | 73 (no Spring Cohort) | 59 (current enrollment Fall 2012) | 19% |
| 2012-2013 | 45 (Fall 2012) | n/a |  |
| **Totals** | **1583** | **930 Average** | **41%** |

*EMS Department Attrition Data Organized by beginning quarter. Fall, Winter, Spring, Summer*

**Table 5: EMS Degree Declarations**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **08/FA** | **09/FA** | **10/FA** | **11/FA** | **12/FA** |
| **EMSFO.AAS−EMERGENCY MEDICAL SERVICES FIRE SCIENCE OPTION – A (includes Semester Version )** | 50 | 117 | 127 | 140 | 103 |
| **EMSVS.AAS−EMERGENCY MEDICAL SERVICES (includes Semester Version)** | 23 | 71 | 72 | 64 | 71 |
| **TOTAL** | **73** | **188** | **199** | **204** | **173** |

*Source Dawn report: Program Review for Programs: Student Program Enrollment. Accessed 09/17/12*

**Table 6: Course Success Rates**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Department | Department Name | Course | FY 07-08 | FY 08-09 | FY 09-10 | FY 10-11 | FY 11-12 (excludes Spring) |
| 666 | Emergency Medical Services | EMS-105 | . | . | 85.7% | 100.0% | 83.3% |
| 666 | Emergency Medical Services | EMS-117 | 53.7% | 54.0% | 54.6% | 42.6% | 43.9% |
| 666 | Emergency Medical Services | EMS-118 | . | . | . | . | . |
| 666 | Emergency Medical Services | EMS-120 | 100.0% | 100.0% | 93.3% | 92.9% | 90.0% |
| 666 | Emergency Medical Services | EMS-135 | 87.7% | 86.6% | 86.0% | 85.8% | 81.3% |
| 666 | Emergency Medical Services | EMS-136 | 71.1% | 79.0% | 69.6% | 74.5% | 82.0% |
| 666 | Emergency Medical Services | EMS-137 | 85.8% | 83.3% | 84.1% | 79.0% | 90.4% |
| 666 | Emergency Medical Services | EMS-138 | 84.3% | 90.4% | 92.2% | 85.3% | 91.1% |
| 666 | Emergency Medical Services | EMS-139 | 97.4% | 91.8% | 92.6% | 97.0% | 95.5% |
| 666 | Emergency Medical Services | EMS-150 | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| 666 | Emergency Medical Services | EMS-201 | . | 100.0% | 100.0% | 100.0% | 64.3% |
| 666 | Emergency Medical Services | EMS-202 | . | 100.0% | 100.0% | 100.0% | . |
| 666 | Emergency Medical Services | EMS-215 | . | 66.7% | 75.5% | 57.1% | 66.7% |
| 666 | Emergency Medical Services | EMS-220 | . | 100.0% | 100.0% | 77.8% | 75.0% |
| 666 | Emergency Medical Services | EMS-221 | . | . | 66.7% | 77.8% | . |
| 666 | Emergency Medical Services | EMS-222 | . | . | 83.3% | 88.9% | . |
| 666 | Emergency Medical Services | EMS-230 | . | 100.0% | 100.0% | 80.0% | 83.3% |

Results analysis

1. Table 4
	1. First Responder (Emergency Medical Responder) Attrition
		1. This course (single course that leads to state licensure) is a very limited demand. It is used by the homeland security short term certificate. It is offered once a year.
			1. Of the five students who passed the course, none have applied or take the state testing.
	2. Paramedic Attrition
		1. Peak year of 2005-2006.
			1. No single or combined variable identified to explain this increase.
			2. Note that this year’s enrollment is not markedly larger or smaller.
		2. Trough year of 2011-2012.
			1. This cohort had no ability to fail and then enter another cohort to finish their education. With the transition to semesters, it was a conscious thought to compartmentalize the quarter system. This fact appears to have motivated students to focus on their education as they had no ability to fail without having to retake the entire program from scratch.
		3. Aggregate pass rates for the program remain above national levels.
			1. In the period from January 2009 through December 2011, the first time pass rate for Sinclair is 72% with aggregate pass rates of 91%.
				1. National comparables for the same time period yield 70% and 86% respectively.
				2. This indicates that the department is able to externally validate the educational process.
				3. The college is an open enrollment institution.
			2. Curricular changes in Fall 2012, including a Human Biology pre-requisite and an Anatomy / Physiology prerequisite, are expected to have an impact on attrition. It is expected that attrition will fall as the entering cohort becomes more scholastically homogenous.
2. Table 5
	1. Degree enrollment has remained stable since its inception in Fall 2008.
		1. It is important to note the academic advisors are requested to send degree student to the EMS office for one on one advising. Rough estimates are approximately half of those who come to the EMS office for degree advising, end up not selecting the EMS degree (see Table 5).
		2. Degree awards are low but stable.
3. Table 6
	1. EMT Courses
		1. The course level success rates typify what has been reported in other areas of this report
	2. Paramedic course
		1. Cardiology was thought to be an area that tended to be more complicated for students. As we redesigned the new semester curriculum, in concert with implementation of the new National EMS Education Standards, we increased the amount of time that student spend on cardiology.
			1. We also created integration days within the program where students are exposed to more complicated / realistic case scenarios.
			2. It is hoped that between increased time on subject and increased complexity, students will leave the program with a greater knowledge level. Additionally, students should be more successful within the second semester of the paramedic program.
				1. This is where cardiology will be presented.

**Section II: Progress Since the Most Recent Review**

Below are the goals from Section IV part E of your last Program Review Self-Study. Describe progress or changes made toward meeting each goal over the last year.

|  |  |  |
| --- | --- | --- |
| **GOALS** | **Status** | **Progress or Rationale for No Longer Applicable** |
| Implement the new state curriculum when it becomes available | In progress [x] Completed [ ] No longer applicable [ ]  | Starting in Fall of 2012, semester curriculum, all levels of the National EMS Education Standards and required process modifications outlined by CoAEMSP (National accreditation body for the Paramedic program) have been or will be implemented. Implementation will need to be evaluated for effectiveness and efficiency.  |
| Become nationally accredited | In progress [x] Completed [ ] No longer applicable [ ]  | At the writing of this annual update, the self study is being internally reviewed at Sinclair in preparation of submission. It is estimated that the self study should be submitted around November 5, 2012. Site visit should be conducted sometime in Spring of 2013. |

Below are the Recommendations for Action made by the review team. Describe the progress or changes made toward meeting each recommendation over the last year.

| **RECOMMENDATIONS** | **Status** | **Progress or Rationale for No Longer Applicable** |
| --- | --- | --- |
| Continue to collect and analyze attrition/retention data to determine the effect of the mandatory attendance policy for paramedic students. If data supports, consider instituting the policy for EMT Basic students. | In progress [ ] Completed [ ] No longer applicable [x]  | Mandatory attendance is now in effect for both EMT and Paramedic courses.  |
| Continue to investigate the potential benefits and problems that might be associated with on-line/hybrid course delivery of 200 level EMS courses | In progress [ ] Completed [ ] No longer applicable [x]  | At this time, enrollment within the degree courses (2300 series) is too low to justify deployment of web development resources for online course creation.  |
| As the new associate’s degree program is implemented, monitor the demand and completion rates to determine the long term viability of the program.  | In progress [x] Completed [ ] No longer applicable [ ]  | * Demand = Measurements of demand for this program remain stable with over 170 students selecting these degrees every Fall since 2009. It is important to note the academic advisors are requested to send degree student to the EMS office for one on one advising. Rough estimates are approximately half of those who come to the EMS office for degree advising, end up not selecting the EMS degree (see Table 5)
* Completion Rates = Low, but stable. (see Table 1)
 |
| Because most of the employment opportunity for graduates of this program is with regional fire departments, the department should ensure it continues to maintain a close and effective working relationship with the leadership of area fire departments. | In progress [x] Completed [ ] No longer applicable [ ]  | Information is obtained through graduate surveys, employer surveys and by having employers on the EMS advisory committee.  |

**Section III: Assessment of General Education & Degree Program Outcomes**

The Program Outcomes for the degrees are listed below. **All program outcomes must be assessed at least once during the 5 year Program Review cycle, and assessment of program outcomes must occur each year**.

| **General Education Outcomes** | **To which degree(s) is this program outcome related?** | **Year assessed or to be assessed.** | **Assessment Methods****Used** | **What were the assessment results?** **(Please provide brief summary data)** |
| --- | --- | --- | --- | --- |
| Oral Communication | All programs | **2011-2012** | EMS 138 (paramedic program): Clearance to Enter Field Experience Tool. Summer 2012.Employer Survey Fall 2011 (page 21)Graduate Survey Fall 2011 (page 20) | This is a competency evaluation: students must pass this clinical based evaluation with at least a one in each area of the evaluation tool. Looking at 112 oral communication assessments, 100% of the students demonstrated competency. Seven characteristics of the student’s oral communication were evaluated. The aggregate average of student performance was 1.65 (max 3, min 0, passing 1)When asked if, “the graduate communicates effectively within a healthcare setting”, 84% state they agree or strongly agree. 16% are neutral (acceptable) when asked this question. No respondents disagreed. When asked if, “the program prepared me to communicate in my role as a paramedic”, 100% state they agree or strongly agree.  |
| Written Communication | All programs | **2011-2012** | EMS 138 (paramedic program): Clearance to Enter Field Experience Tool. Summer 2012Employer Survey 2011 (page 21)Graduate Survey Fall 2011 (page 20) | This is a competency evaluation: students must pass this clinical based evaluation with at least a one in each area of the evaluation tool. Looking at 112 written communication assessments, 100% of the students demonstrated competency. Eleven characteristics of the student’s written communication were evaluated. The aggregate average of student performance was 1.62 (max 3, min 0, passing 1)When asked if, “the graduate communicates effectively within a healthcare setting”, 84% state they agree or strongly agree. 16% are neutral (acceptable) when asked this question. No respondents disagreed.When asked if, “the program prepared me to communicate in my role as a paramedic”, 100% state they agree or strongly agree. |
| Critical Thinking/Problem Solving | All programs | **2012-2013** |  |  |
| Values/Citizenship/Community | All programs | **2013-2014** |  |  |
| Computer Literacy | All programs | **2014-2015** |  |  |
| Information Literacy | All programs | **2015-2016** |  |  |
|  |  |  |  |  |
| **Program Outcomes** | **To which course(s) is this program outcome related?** | **Year assessed or to be assessed.** | **Assessment Methods****Used** | **What were the assessment results?** **(Please provide brief summary data)** |
| Discuss how EMS management and critical care medicine knowledge can be used to motivate and change behaviors of EMS providers and EMS institutions. Include quality improvement, legal perspectives, funding streams, critical thinking skills and direct patient care applications.  | ENG 1101, COM 2206, COM 2211 EMS 2300,EMS 2305, EMS 2310, EMS 2315 EMS 2180EMS 2200, EMS 2205 | Starting 2013-2014 | EMS Department Degree Graduate Surveys ( | A draft version of a degree graduate survey is being developed. The number of grads is too low to meaningfully evaluate. Efforts will be made when number of grads is > 25.  |
| Demonstrate entry-level competency in the cognitive, psychomotor and affective domains of paramedic education.  | PE Elect, MAT 1130, MAT 1440 HIM Elect, BIO 1107EMS 1150, EMS 1155, EMS 2100, EMS 2105, EMS 2110, EMS 2125, EMS 2130, EMS 2135, EMS 2150, EMS 2155, EMS 2160, EMS 2175, EMS 2180, EMS 2200, EMS 2205 | Yearly | Graduate Surveys (page 20)Employers Surveys (page 21) | * Overall, graduates surveyed are satisfied with the quality of the program.
* Recommendations and Plans for Fall 2012 and beyond.
	+ Increase radio reports
* Students will be required to accomplish set numbers of both written and verbal reporting before being cleared to enter the clinical setting.
	+ Drug seeking patient and psychiatric patients
	+ Laboratory scenarios can be created to address these patient subgroups.
* Overall, employers surveyed are satisfied with the quality of the program.
* Recommendations and Plans for Fall 2012 and beyond.
	+ Increase critical thinking skills
		- Plans in place to add more lab activities that are scenario based.
	+ Increase interpersonal interactions
		- Plans in place to add more lab activities that are scenario based and team oriented.
	+ 12 Lead
		- Increased time spent on this subject within both lecture and lab.
		- Increase complexity of 12 lead analyses.
 |
| Discuss the behaviors of people when dealing with public service emergencies. Include characteristics related to EMS and fire and reflect on local, regional and historical perspectives.  | HUM Elect, ENG 1101, COM 2206, COM 2211 FST 1111, FST 1113, PSY 1100EMS 2135, EMS 2160, EMS 2175, EMS 2180 | Starting 2013-2014 | EMS Department Degree Graduate Surveys | A draft version of a degree graduate survey is being developed. The number of grads is too low to meaningfully evaluate. Efforts will be made when number of grads is > 25. |
| Describe how EMS operates within a fire service model: Include characteristics of crew configurations, job duties, job satisfaction, cross training and delivery of health care services.  | ENG 1101, COM 2206, COM 2211, FST 1112, FST 2230, EMS 2180EMS 2200, EMS 2205 | Starting 2013-2014 | EMS Department Degree Graduate Surveys | A draft version of a degree graduate survey is being developed. The number of grads is too low to meaningfully evaluate. Efforts will be made when number of grads is > 25. |

**General Education Outcomes**

1. Are changes planned as a result of the assessment of general education outcomes? If so, what are those changes?

Written communication has been identified by employers as an area needing improvement. To help accomplish improvement in this area, within both the EMT and Paramedic laboratories, students will be required to write mock patient care records. These records will be evaluated by faculty. Additionally, in the clinical setting, paramedic students will now have direct contact with faculty every three weeks. Students’ documentation skills will be assessed in that setting as well.

1. How will you determine whether those changes had an impact?

It will take at least 2 years to see any change in the employer surveys. Employer surveys go out every fall. So the Fall 2012 survey is evaluating student who graduated last year. Fall 2013 will be the first opportunity to see any potential change in this area. The hope is that employers will see greater quality within the employee’s patient care reports.

**Program Outcomes**

1. Are changes planned as a result of the assessment of program outcomes? If so, what are those changes?

The program outcomes for the EMT and Paramedic programs are stable and defined by national curriculum. The paramedic outcomes are reviewed by the EMS advisory committee at least every year to ensure they are aligned with the needs of the communities of interest. This is a requirement of the national accreditation system for paramedic programs.

The outcomes for the degree programs have been more difficult to evaluate. With the degrees being relatively new (Fall 2008), the numbers of students who has completed any EMS degree remains below 25. The plan is to deliver an EMS degree graduate survey sometime in Summer of 2013.

1. How will you determine whether those changes had an impact?

Once the survey is deployed, the department will be better positioned to make informed decisions about changing degree program outcomes. The outcomes of the licensure level courses are set by national / state curriculum.

**Improvement Efforts**

1. What were the results of changes that were planned in the last Annual Update? Are further changes needed based on these results?
	1. Planned Changes
		1. Implementation of semesters.
			1. Enrollment is relatively stable.
			2. Attrition is improved
			3. NREMT pass rate maintain or improves.
			4. RESULTS
				1. Semester curriculum is implement

Fully for EMT courses

Paramedic first semester executed with second semester in queue.

* + 1. Closeout of the quarter system
			1. Students currently within the quarter system (specifically paramedic students) are not able to move into the semester system of the paramedic program. The new program is incompatible with the old program.
			2. All students enrollment within the Fall 2011 start of the paramedic program are being monitored closely. If a student fails one of the courses in the series, it will be determined if it is possible and appropriate, to offer concurrent classes to ensure a chance at completing the program.
			3. RESULTS
				1. Paramedic cohort with decreased attrition.
				2. No need to offer special courses for those students who did fail the quarter system. Student performance was examined and student performance was too distant from acceptable standards for concurrent courses. Students would have been setup to fail.
		2. Update all faculty on new scopes of practice and new curriculum.
			1. RESULTS
				1. EMS faculty meeting were conducted to update / upgrade faculty into new scopes of practice.
				2. This will continue with reinforcement in Spring faculty meetings
		3. Apply for national accreditation
			1. Complete and submit the self study by Dec 2012.
			2. RESULTS
				1. Self study is now being internally reviewed with projected submission by 11/01/12.
1. Are there any other improvement efforts that have not been discussed in this Annual Update submission?

The department is working on a complete revision of how it gathers and tracks data within the paramedic program. Starting in Fall of 2012, with the help of the Sinclair IT department, we will be using web-based evaluation tools within the laboratory and clinical settings. These forms are based on various national level skill sheets. Data will also be extracted from Angel regarding quizzes, exams, and other cognitive based evaluations. These two data streams will be merged in a web-based database which will accessible by the student, faculty and administration. (See figure

The laboratory setting has been restructured to create three types of experiences: Teaching lab where students are introduced to psychomotor skills. Practice labs where students are to refine skills taught through repetition. Finally a formal testing environment will be utilized to verify competency. Data from informal and formal evaluations of student’s performance will be gathered by EMS faculty using iPADs and stored within these online skills sheets. Additionally, student’s clinical activities will also be recorded within this environment.

When merged with the cognitive data from Angel, what will remain is a nearly paperless system where students can examine their performance on any component of the program. They can reflect on a topic from 6 months ago as they prepare for comprehensive exams. Faculty will also be able to see each other’s evaluations of student’s performance. How sections of students perform within various skills will easily be seen. The department will be able to modify the learning environment once weaknesses are discovered. Where do students fail within a particular skill demonstration? Does a new delivery method have improved success? Is there a connection between cognitive demonstration and clinical performance? These questions and many more will now be able to be explored.

If the system is sound, it is planned to implement this concept within the EMT program (EMS 1150 and 1155). It will take at least until Fall 2013 to determine the viability of this system.

Figure 5: Comprehensive Student Performance Tracking System Flowchart

Questions regarding completion of the Annual Update? Please contact the Director of Curriculum and Assessment at 512-2789 to schedule a time to review the template and ask any questions.

GRADUATE SURVEY

FALL 2011 – Response Rate = 7/45 = 16%

SINCLAIR COMMUNITY COLLEGE EMERGENCY MEDICAL SERVICES

ODPS #OH-326

**5 = Strongly Agree 4 = Generally Agree 3 = Neutral (acceptable) 2 = Generally Disagree 1 = Strongly Disagree**

**I. KNOWLEDGE BASE (Cognitive Domain)**

**THE PROGRAM:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 5 | 4 | 3 | 2 | 1 |
| A. Helped me acquire the EMS knowledge necessary to function in a healthcare / EMS environment. | **100%** |  |  |  |
| B. Helped me acquire the general medical knowledge base necessary to function in a healthcare / EMS environment. | **100%** |  |  |  |
| C. Prepared me to collect relevant data from patients. | **100%** |  |  |  |
| D. Prepared me to evaluate relevant patient information. | **100%** |  |  |  |
| E. Prepared me to formulate an appropriate treatment plan. | **100%** |  |  |  |
| F. Trained me to use sound judgment while functioning in a healthcare / EMS environment. | **86%** | **14%** |  |  |

**II. CLINICAL PROFICIENCY (Psychomotor Domain)**

**THE PROGRAM:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 5 | 4 | 3 | 2 | 1 |
| G. Prepared me to perform a broad range of clinical skills. | **100%** |  |  |  |
| H. Prepared me with the skills to perform a thorough patient assessment | **100%** |  |  |  |
| I. Prepared me to perform approved procedures. | **86%** | **14%** |  |  |
| J. Prepared me to interpret diagnostic procedures | **86%** | **14%** |  |  |

**III. BEHAVIORAL SKILLS (Affective Domain)**

**THE PROGRAM:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 5 | 4 | 3 | 2 | 1 |
| K. Prepared me to communicate in my role as a paramedic | **100%** |  |  |  |
| L. Prepared me to conduct myself in an ethical manner. | **100%** |  |  |  |
| M. Prepared me to conduct myself in a professional manner. | **100%** |  |  |  |
| N. Taught me to manage my time efficiently while functioning in a healthcare / EMS environment. | **100%** |  |  |  |

**IV. GENERAL INFORMATION *(Check yes or no)***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 5 | 4 | 3 | 2 | 1 |
| A. I have actively pursued attaining my national Paramedic credential(s). | **100%** |  |  |  |
| B. I am a member of a state Paramedic professional association. | **57%** | **29%** | **14%** |  |
| C. I am a member of a national Paramedic professional association. | **71%** | **14%** | **14%** |  |
| D. I actively participate in continuing education activities. | **100%** |  |  |  |

**V. ADDITIONAL COMMENTS**

Please rate and comment on the OVERALL quality of your preparation as a Paramedic:

Comment Themes

* Excellent preparation to become a paramedic (3).
* Some areas well covered, some briefly covered + feel should have been covered more (1).

**Based on your work experience, please identify two or three strengths of the program?**

Comment Themes

* Very prepared performing ALS skills after school (2).
* Sinclair Paramedics seem more competent and prepared vs. other program students (2).

**Based on your work experience, please make two or three suggestions to further strengthen the program?**

Comment Themes

* More field vs hospital time (1).
* Local protocol coverage in class (1).
* Cadaver labs (1).
* Drill on radio reports (1).
* Drug seeking patients (1).

**What qualities/skills were expected of you upon employment that were not included in the program?**

Comment Themes

* Care for patients with psychiatric problems (1)
* AVOC training (EVOC?) (1)
* PALS licensure (1)
* Radio Reports (1)

**Please provide comments and suggestions that would help to better prepare future graduates.**

Comment Themes

* EJ's (1)
* Sinclair's paramedic program is one of the best (1).
* Differences between Ohio's protocols & care and Miami Valleys protocols & care (2).
* Psychiatric care (1).
* Radio reports (1).

EMPLOYER SURVEY

FALL 2011 – Response Rate = 25/107 = 23%

SINCLAIR COMMUNITY COLLEGE EMERGENCY MEDICAL SERVICES

ODPS #OH-326

**5 = Strongly Agree 4 = Generally Agree 3 = Neutral (acceptable) 2 = Generally Disagree 1 = Strongly Disagree**

I. KNOWLEDGE BASE

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| The Graduate(s) | 5 | 4 | 3 | 2 | 1 |
| A. Has the EMS knowledge necessary to function in a healthcare setting | **100%** |  |  |  |
| B. Has the general medical knowledge necessary to function in a healthcare setting. | **100%** |  |  |  |
| C. Is able to collect data from charts and patients. | **79%** | **21%** |  |  |
| D. Is able to interpret patient data. | **88%** | **12%** |  |  |
| E. Is able to recommend appropriate diagnostic and therapeutic procedure. | **79%** | **21%** |  |  |
| F. Uses sound judgment while functioning in a healthcare setting | **88%** | **8%** | **4%** |  |

Comments: Students have been well prepared

II. CLINICAL PROFICIENCY

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| The Graduate(s): | 5 | 4 | 3 | 2 | 1 |
| G. Effectively performs a broad range of clinical skills. | **96%** | **4%** |  |  |
| H. Possesses the skills to perform patient assessment. | **96%** | **4%** |  |  |
| I. Is able to perform approved therapeutic procedures and modalities. | **96%** | **4%** |  |  |
| J. Is able to perform and interpret diagnostic procedures. | **88%** | **12%** |  |  |

Comments: Graduates are clinically sound. All have developed and continue to improve with experience.

III. BEHAVIORAL SKILLS

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| The Graduate(s) | 5 | 4 | 3 | 2 | 1 |
| K. Communicates effectively within a healthcare setting. | **84%** | **16%** |  |  |
| L. Conducts himself/herself in an ethical and professional manner. | **92%** | **8%** |  |  |
| M. Functions effectively as a member of the healthcare team. | **96%** | **4%** |  |  |
| N. Accepts supervision and works effectively with supervisory personnel. | **96%** |  | **4%** |  |
| O. Is self-directed and responsible for his/her actions. | **76%** | **20%** | **4%** |  |
| P. Arrives to work prepared and on time. | **92%** | **8%** |  |  |
| Q. Contributes to a positive environment within the department. | **96%** | **4%** |  |  |

Comments: Excellent- We typically don't hire new grads due to entry process. M-Q are very individual traits and skills. Working as team or large incident is difficult for many. Some students need to participate more with self directed responsibilities such as helping nurses get equipment and facilities ready for next patient.

OVERALL RATING:

Please rate and comment on the OVERALL quality of this program’s graduate(s):

5 = Excellent (9) 4 = Very Good (7) 3 = Good (1) 2 = Fair (0) 1 = Poor (0)

Comments: Students have been well prepared

What qualities or skills did you expect of the graduate upon employment that he/she did not possess?

Comments Themes:

* Well rounded good level of experience (4)
* Application of information (similar to all new paramedics) (3)
* Skills: IO insertions, CPAD. Central lines. Documentation. 12 Lead (1)
* Interpersonal Skills (3)
* Critical thinking. Teaming. (1)

Please provide comments and suggestions that would help this program to better prepare future graduates.

Comments Themes:

* Critical thinking (1)
* Good work with high expectations (3)
* Get students into field earlier (1)
* Cover optional skills (1)

 What are the strengths of the graduate(s) of this program?

 Comments Themes:

* Well prepared: skills and knowledge (9)
* More range in clinical/diagnostic performance. More stress on critical thinking skills. (1)
* Assessment & critical thinking (1)
* Attrition system is good (1)
* Able to perform with little supervision (1)