

부록 1. 파이썬 코드

```

import csv, re, string

key_emr = ["emr", "EMR", "의무기록", "ocs", "OCS", "차트", "차트", "의무 기록", "업그레이드", "업데이트", "update", "Update", "up date", "프로그램", "시스템",
"program", "Program", "system", "System", "인터페이스", "팝업", "pop up", "Pop up", "popup", "Popup", "배너", "전산", "의료정보", "pacs", "PACS", "ERM",
"이미지", "사본", "화면", "스크린", "인터페이스", "디자인", "알리미", "리마인더", "디폴트", "기본값", "ADR", "약물이상반응"]
key_act = ["취소", "입력", "처방", "기입", "기재", "조회", "기록", "확인", "활성화", "검사", "오더", "갱신", "알림", "경고", "검색", "d/c", "D/C", "복사", "붙여넣기",
"식별", "선택", "투약", "투여", "용법"]
key_error = ["누락", "변경", "오류", "잘못", "중복", "에러", "error", "Error", "착각", "혼동", "혼란", "과다", "금지", "과오", "임의"]

cat_emr_count=0
cat_act_count=0
cat_error_count=0

f=open('Med_harm_event.csv','r')
ff=open('MHE_count2.csv','w', newline='')

rdr=csv.reader(f)
wr=csv.writer(ff)

for x in rdr:
    case_ID=x[0]
    text_report=x[1]
    for y1 in key_emr:
        if y1 in text_report:
            cat_emr_count+=1
    for y2 in key_act:
        if y2 in text_report:
            cat_act_count+=1
    for y3 in key_error:
        if y3 in text_report:
            cat_error_count=1
    wr.writerow([case_ID, cat_emr_count, cat_act_count, cat_error_count])
    cat_emr_count=0
    cat_act_count=0
    cat_error_count=0

f.close()
ff.close()

f=open('MHE_count2.csv','r')
ff=open('MHE_count_result2.csv','w', newline='')

print_list=[]
YN_keyword=0

rdr=csv.reader(f)
wr=csv.writer(ff)

for x in rdr:
    case_ID=x[0]
    YN_EMR=int(x[1])
    YN_act=int(x[2])
    YN_error=int(x[3])
    emr_act=YN_EMR+YN_act
    act_error=(YN_error*10)+YN_act
    if YN_EMR > 0:
        if YN_act >= 2:
            YN_keyword=1
        else:
            YN_keyword=0
    elif act_error > 11:
        YN_keyword=1
    else:
        YN_keyword=0
    print_list=[case_ID, YN_keyword]
    wr.writerow(print_list)

f.close()
ff.close()

```

참고문헌

1. 의료기관평가인증원, 환자안전사고 주제별 보고서, 2018, available at: <https://www.kops.or.kr/portal/board/reference/boardDetail.do#>