



Records from European Medical Schools at ECFMG Programme by Country: Performance Data of Applicants to ECFMG

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(ECFMG®)**

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Background

- Physician mobility & European legislation
 - Mutual recognition of degrees/qualifications
 - Bologna Process and Medical Education - The Tuning Project
 - Identification of qualifications
 - European Credit Transfer System (ECTS)
 - Format for documentation of degree qualifications
 - **“Development of European quality assurance standards for higher education”** (Cumming & Ross, 2007)



Purpose

- Provide an overview on graduates/students from medical schools outside the US and Canada (IMGs) applying to ECFMG for certification
- Performance data for graduates of international medical schools
 - Outcomes for US licensing exams
 - Success rate for ECFMG certification



ECFMG®'s Role in US Health Care

- Private, non-profit, non-governmental organization committed to promoting excellence in international medical education
- Formally incorporated as an independent organization in 1956
- Responsible for establishing International Medical Graduates' (IMGs') eligibility to take examinations
- Responsible for certifying IMGs readiness to enter postgraduate medical education programs



ECFMG's Mission

“The ECFMG promotes quality health care for the public by certifying international medical graduates for entry into U.S. graduate medical education, and by participating in the evaluation and certification of other physicians and health care professionals. In conjunction with the Foundation for Advancement of Medical Education and Research (FAIMER®), and other partners, it actively seeks opportunities to promote international medical education and research through programmatic and research activities.”



ECFMG Certification Requirements

- Must be an 'International Medical Graduate'
 - Medical school located outside the US or Canada
- Pass a series of examinations
 - USMLE™ Step 1, Step 2 CK, Step 2 CS
 - Verification of medical education credentials
 - Medical school listed in IMED
 - Valid graduation year
 - 4 credit (academic) years
- Must be certified to:
 - Enter accredited US postgraduate medical education programs
 - Apply to take USMLE Step 3
 - Apply for licensure in all US jurisdictions



Definitions

- Examinations
 - USMLE™ Step 1: Basic Science
 - USMLE™ Step 2 CK: Clinical Science Knowledge
 - Clinical Skills: Standardized Patient Examination
- ECFMG Applicants
 - Registered for examinations required for certification between 1993 and 2007
- ECFMG Certificate Holders
 - Met all certification requirements
- Delineation of the European Region
 - 47 'member states' as defined by the Council of Europe
 - Eligible for participation in the Bologna Process
 - 41 member states with medical schools listed in IMED



Data Sources

- ECFMG Application & Certification databases
 - Demographics & examination performance of medical school students and graduates
- FAIMER International Medical Education Directory
 - Characteristics of medical schools



Delineation of European Region: Council of Europe Countries (47)

| | | |
|------------------------|---------------|--|
| Albania | Germany | Poland |
| Andorra | Greece | Portugal |
| Armenia | Hungary | Romania |
| Austria | Iceland | Russian Federation |
| Azerbaijan | Ireland | San Marino |
| Belgium | Italy | Serbia [*] |
| Bosnia and Herzegovina | Latvia | Slovakia |
| Bulgaria | Lithuania | Slovenia |
| Croatia | Liechtenstein | Spain |
| Cyprus | Luxembourg | Sweden |
| Czech Republic | Malta | Switzerland |
| Denmark | Moldova | The former Yugoslav Republic of Macedonia |
| Estonia | Monaco | |
| Finland | Montenegro | Turkey |
| France | Netherlands | Ukraine |
| Georgia | Norway | United Kingdom |



**Demographics:
ECFMG Applicants &
Certificate Holders
1993-2007**

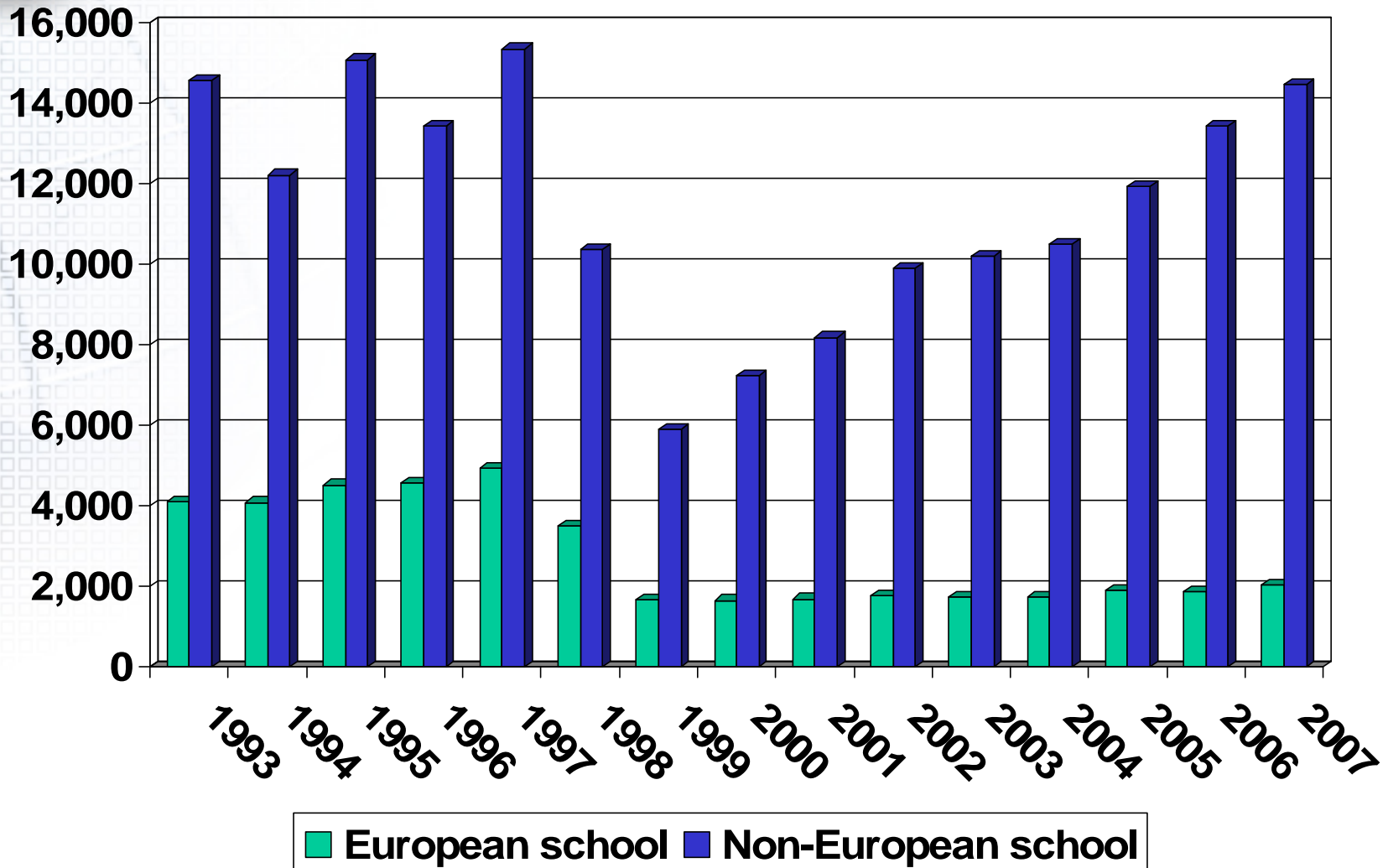


European Medical School Countries with Applicants to ECFMG 1993-2007

| Medical School Country | Number of Applicants |
|-----------------------------------|----------------------|
| Germany | 7488 |
| Russia | 3814 |
| Romania | 3385 |
| Ireland | 3366 |
| United Kingdom | 2907 |
| Poland | 2582 |
| Turkey | 2338 |
| Ukraine | 1957 |
| Italy | 1757 |
| Hungary | 1601 |
| Other Council of Europe countries | 10665 |

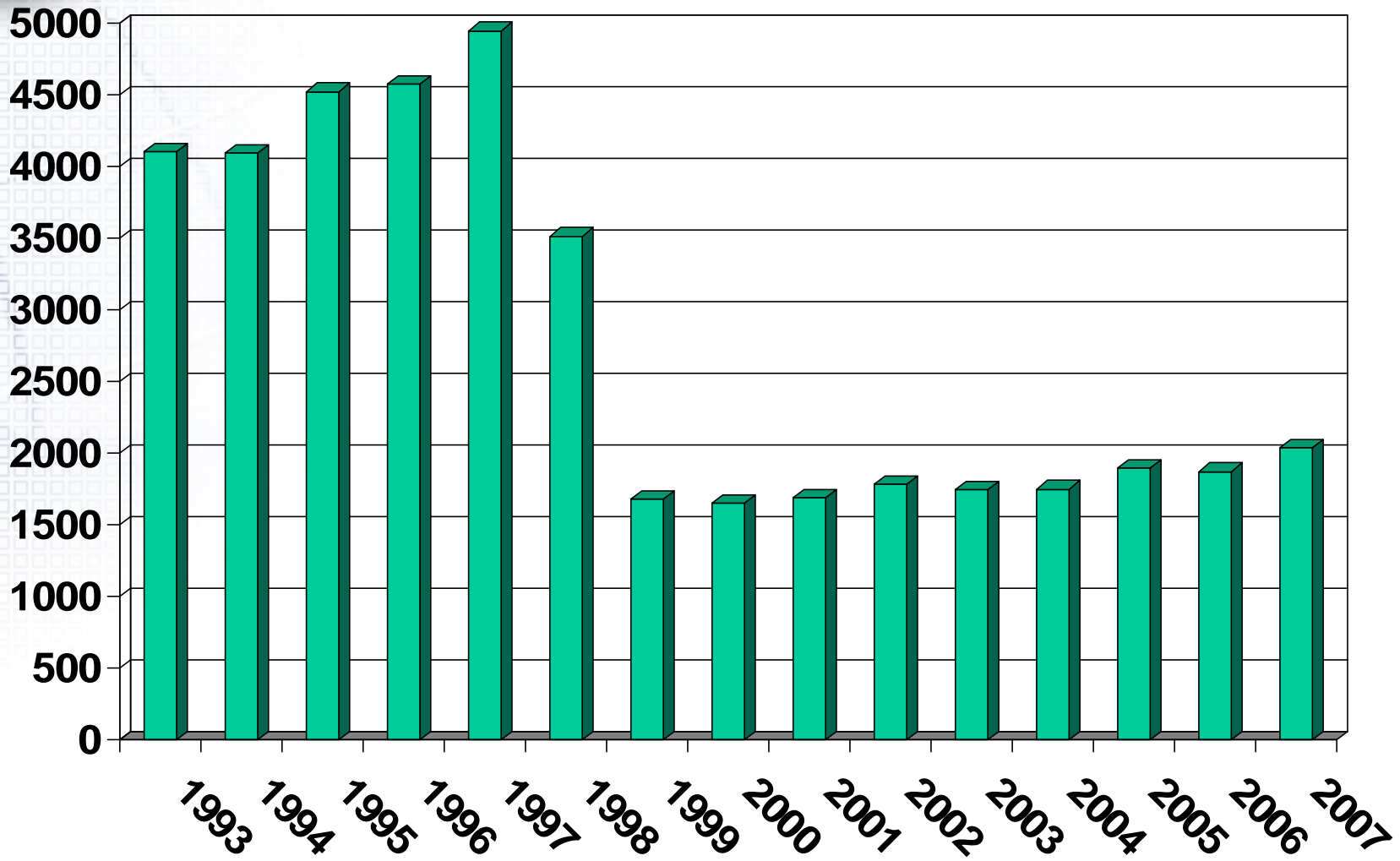


ECFMG Initial Applicants 1993-2007 by Location of Medical School



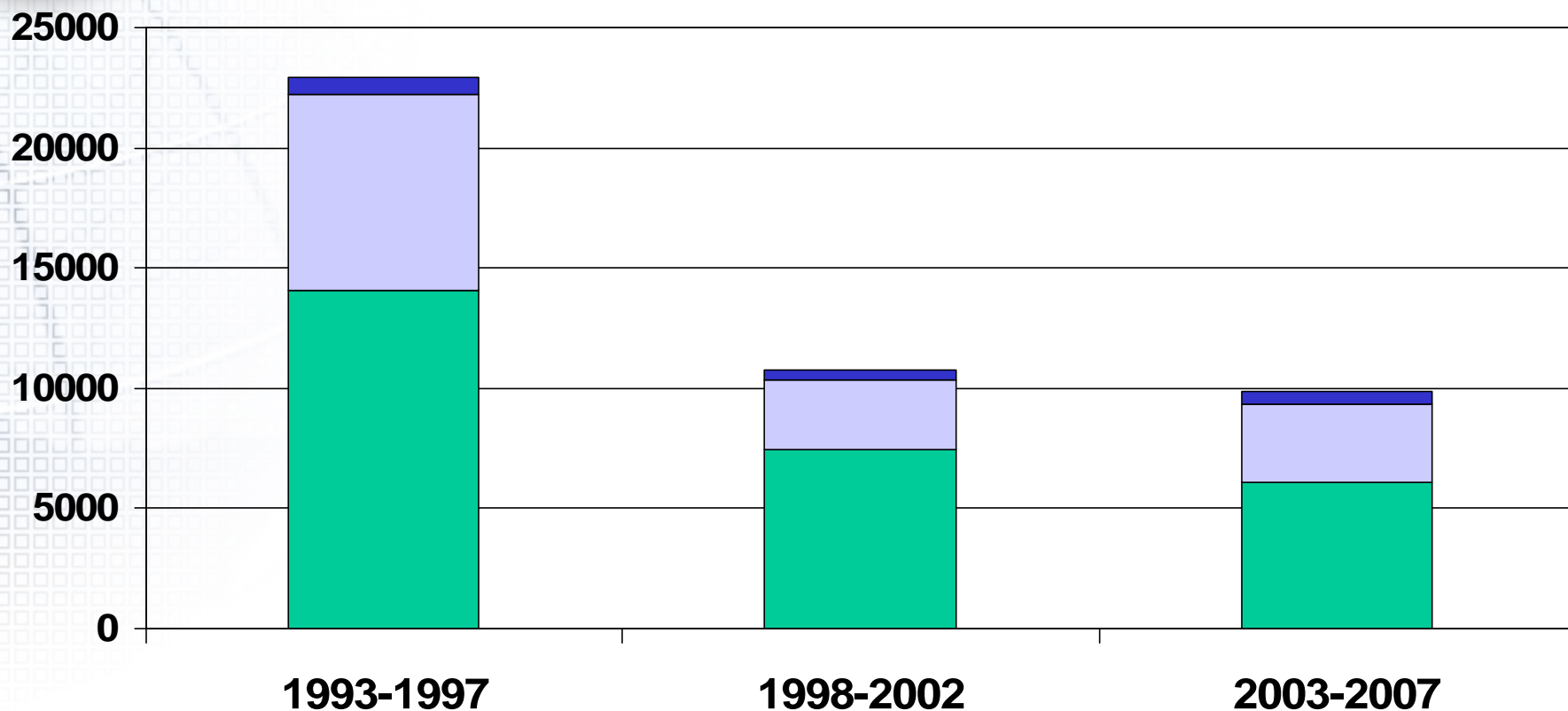


ECFMG Initial Applicants 1993-2007: Number from European Medical Schools





ECFMG Applicants from European Medical Schools by Application Year



■ European cit, European sch
■ European cit, non-European sch

■ Non-European cit, European sch

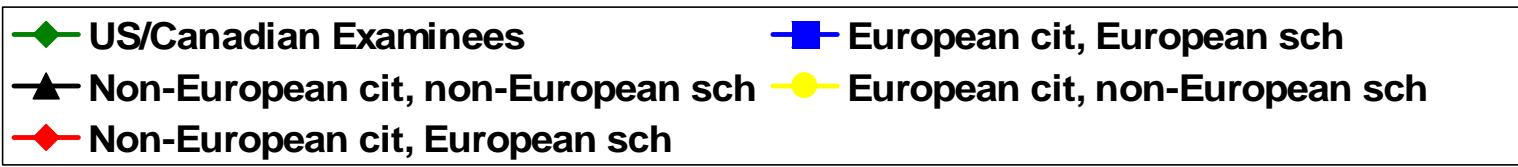
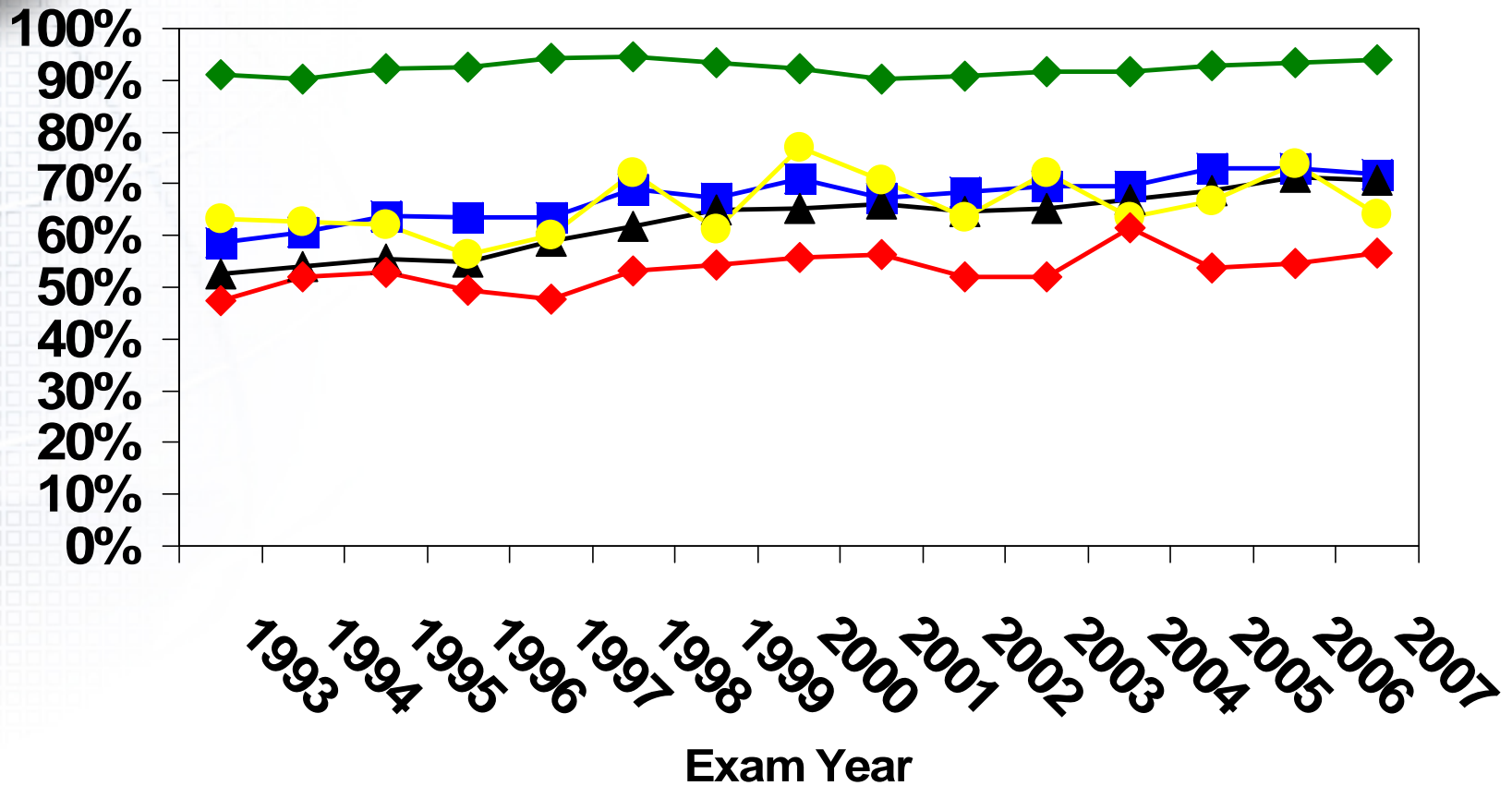


Examination Performance

Exam Years 1993-2007

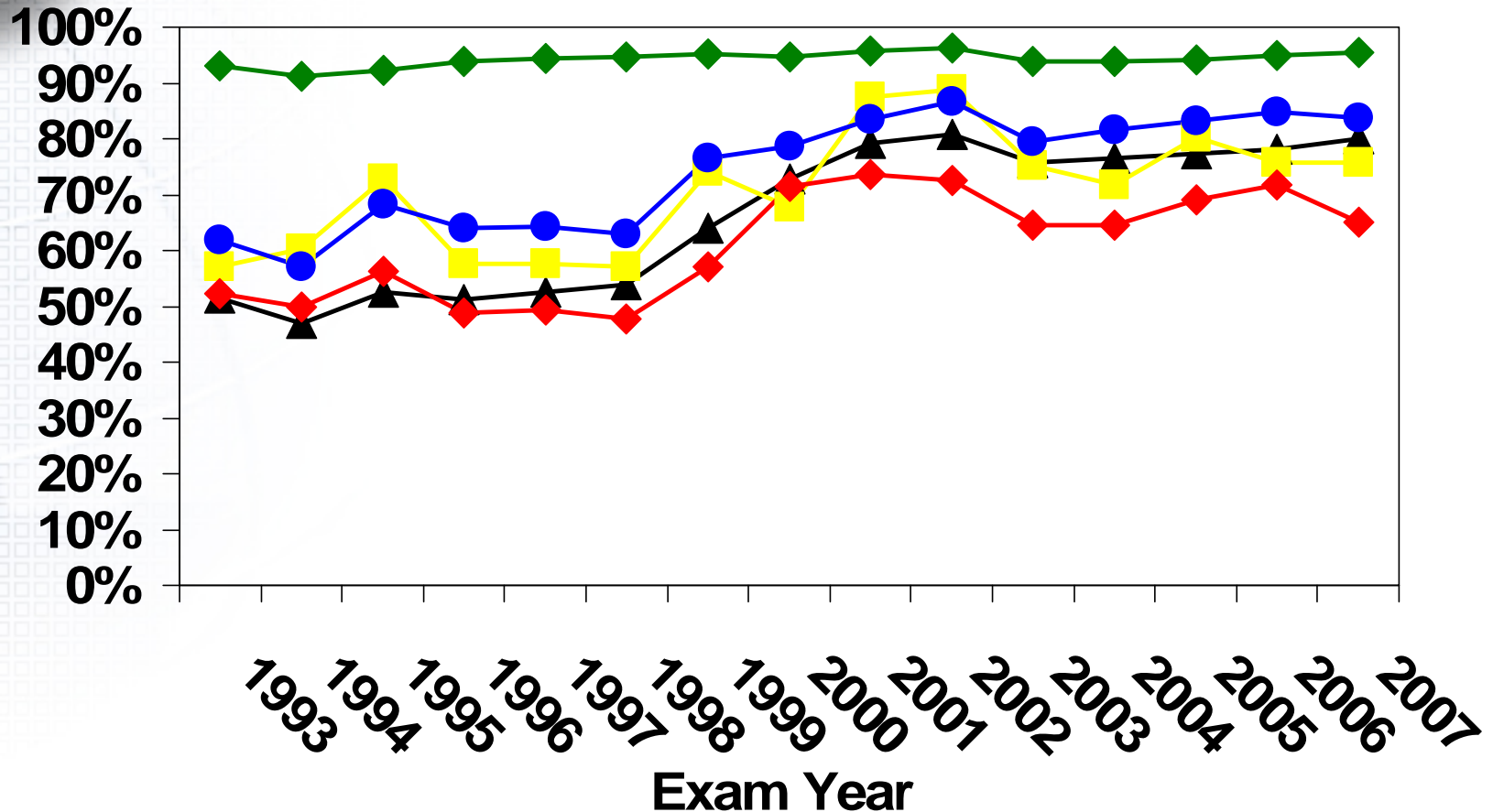


Basic Science (USMLE Step 1) First Attempt Pass Rates by Exam Year





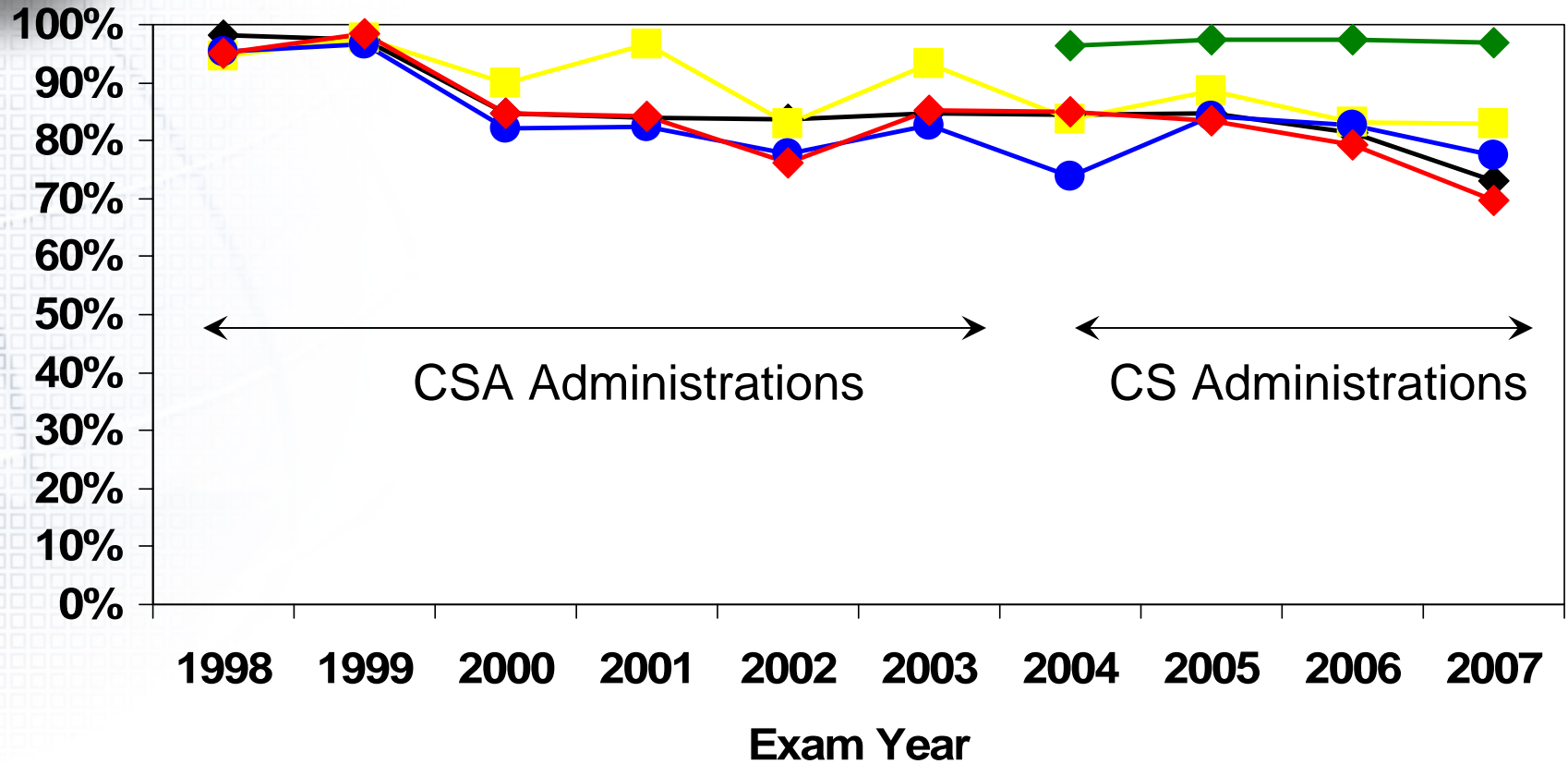
Clinical Science Knowledge (USMLE Step 2CK) First Attempt Pass Rates by Exam Year



- ◆ US/Can examinees
- European cit, Non-European Sch
- ◆ Non-European cit, European sch
- ▲ Non-European cit, Non-European sch
- European cit, European sch



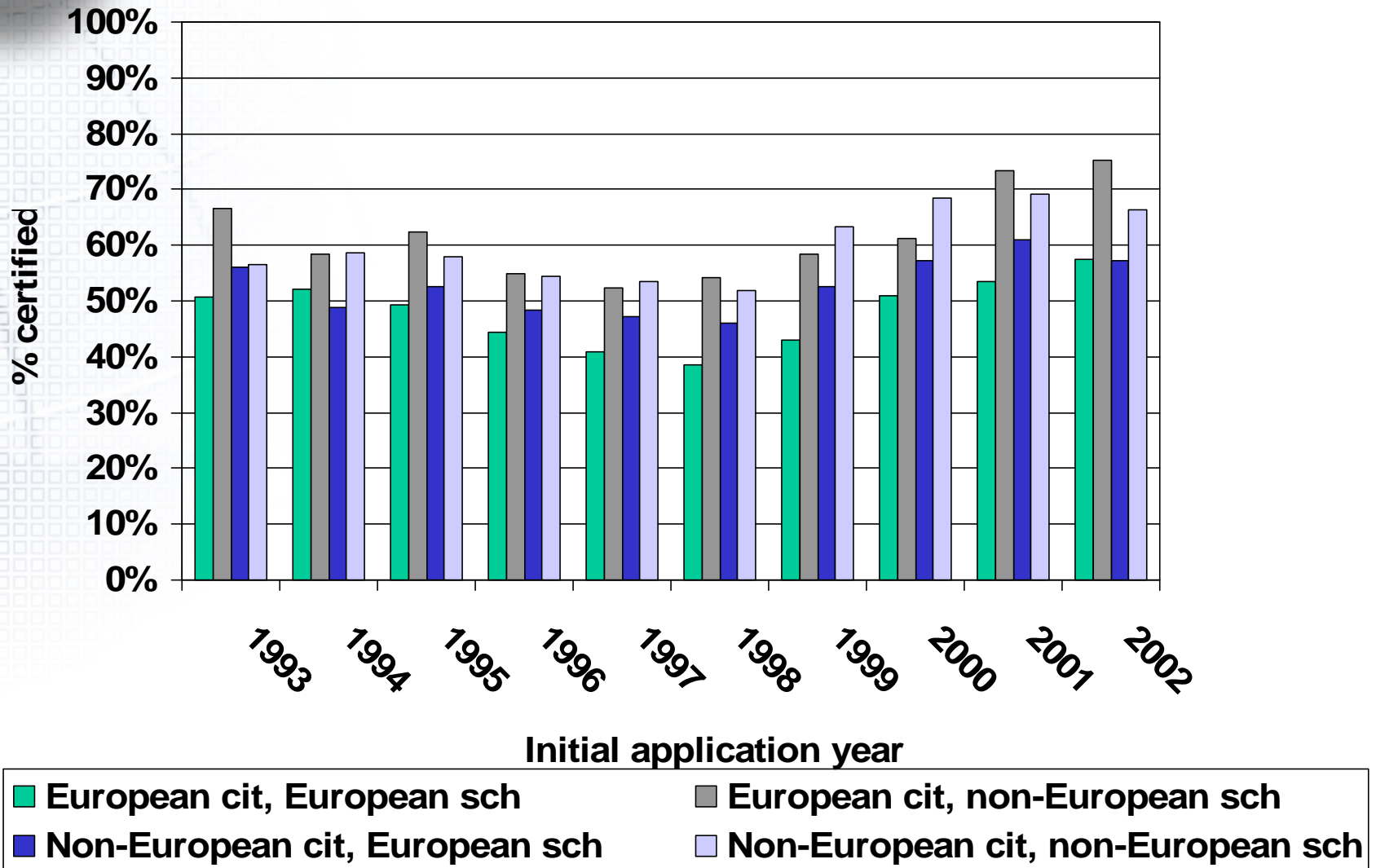
Clinical Skills (CSA & Step 2CS) First Attempt Pass Rates by Exam Year



- ◆ US/Can examinees
- ◆ European cit, Non-European Sch
- ◆ Non-European cit, European sch
- ◆ Non-European cit, Non-European sch
- ◆ European cit, European sch

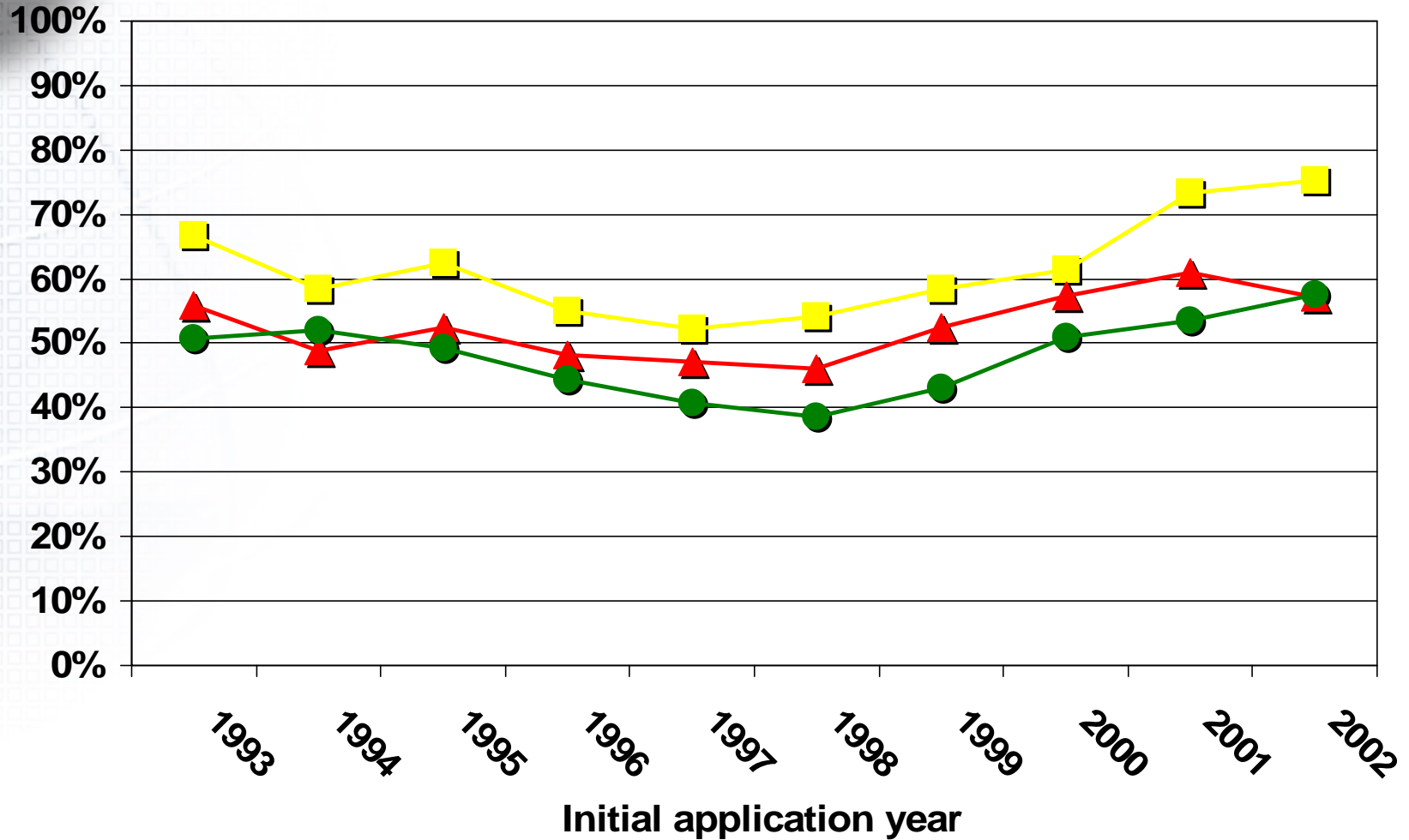


ECFMG Certification Success by Initial Application Year, Country of Medical School, & Citizenship





ECFMG Certification Success by Initial Application Year - European and non-European Medical Schools



■ European cit, non-European sch ▲ Non-European cit, European sch
● European cit, European sch



First Attempt Pass Rates for Selected European Medical School Countries

| Medical School Country | # Applicants | Basic Science | Clinical Knowledge | Clinical Skills |
|------------------------|--------------|---------------|--------------------|-----------------|
| Germany | 7488 | 74% | 78% | 89% |
| Hungary | 1601 | 62% | 60% | 79% |
| Ireland | 3366 | 68% | 84% | 96% |
| Italy | 1757 | 49% | 40% | 66% |
| Poland | 2582 | 52% | 58% | 84% |
| Romania | 3385 | 65% | 62% | 80% |
| Russia | 3814 | 42% | 57% | 81% |
| Spain | 790 | 70% | 69% | 76% |
| Turkey | 2338 | 73% | 67% | 72% |
| Ukraine | 1957 | 38% | 52% | 77% |
| United Kingdom | 2907 | 79% | 91% | 99% |

Exams Administrations 1993 - 2007

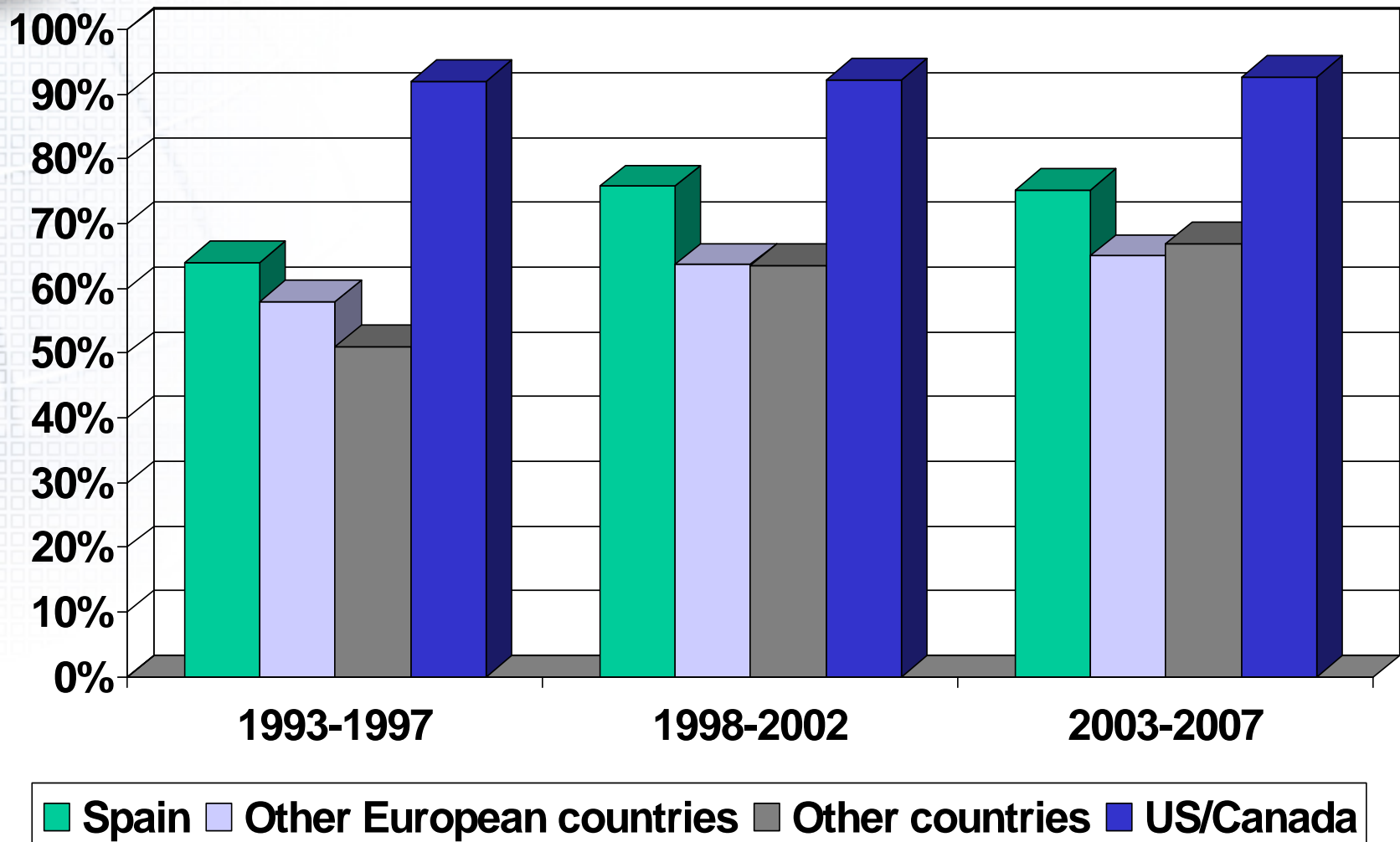


Examination Performance

Selected Group Comparisons

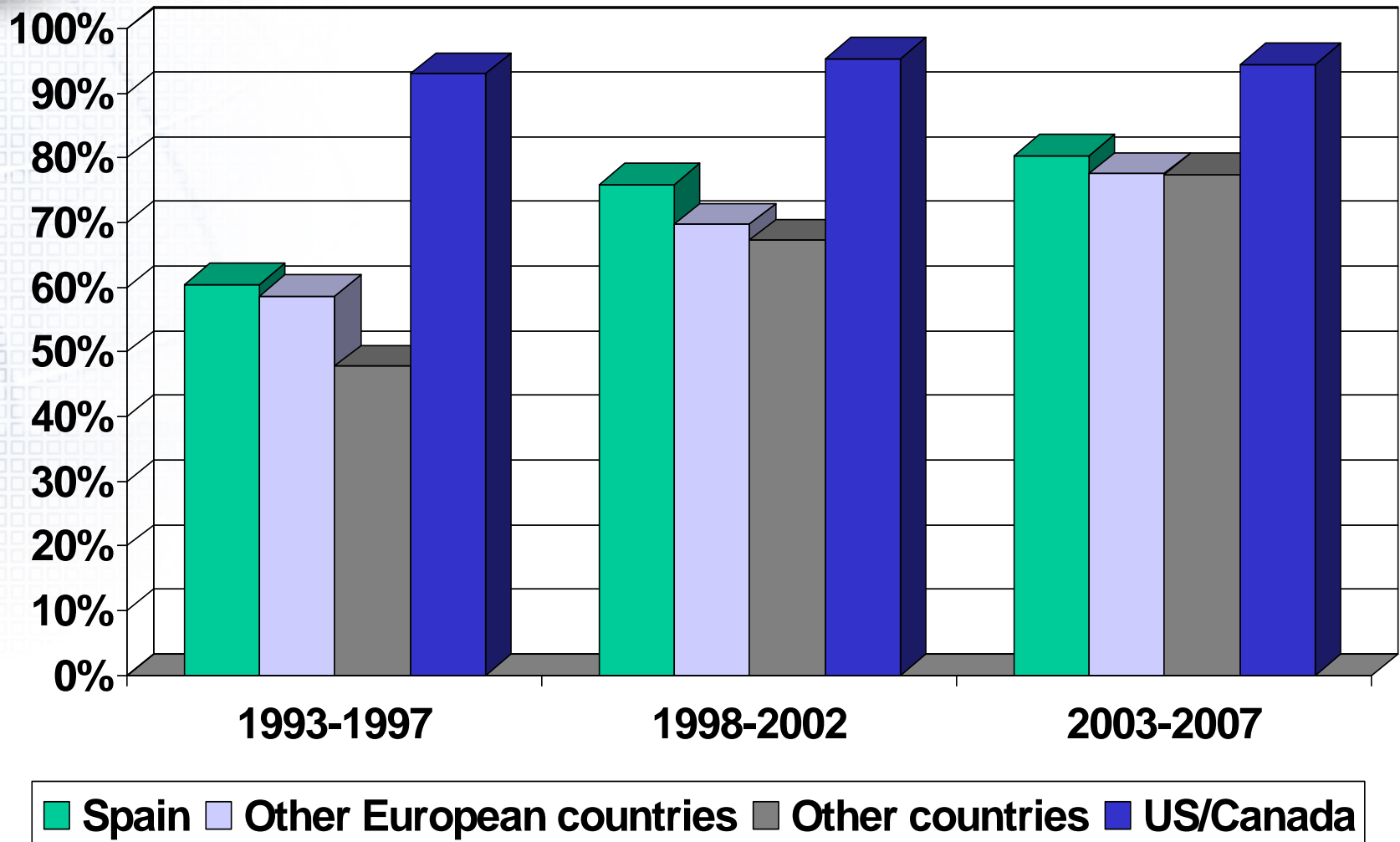


First attempt Basic Science (USMLE Step 1) Pass Rates: Country Level Example



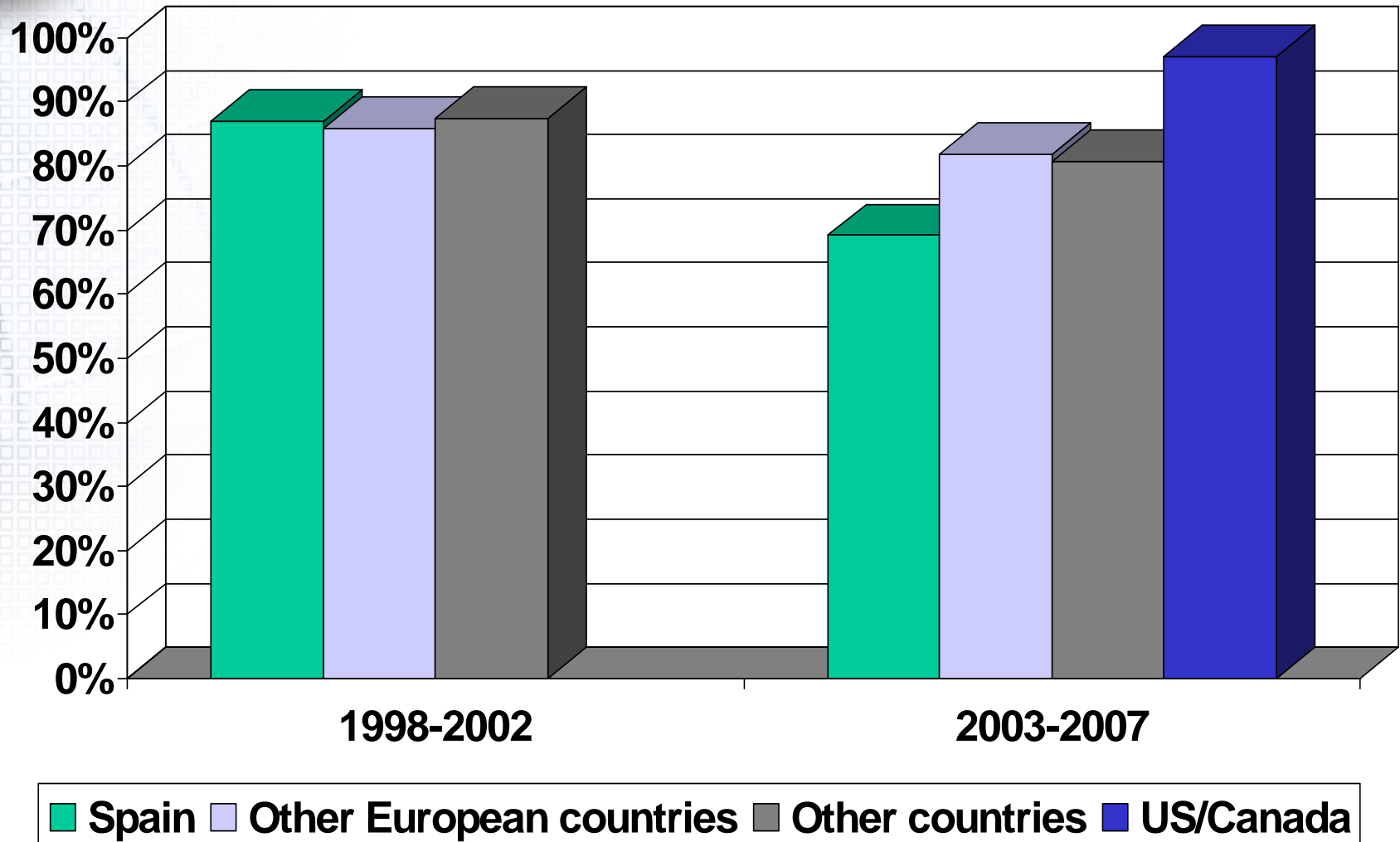


First attempt Clinical Knowledge (USMLE Step 2): Country Level Example





First attempt Clinical Skills (CSA & USMLE Step 2 CS) Pass Rates: Country Level Example





Concluding Remarks

- Certification process in United States
 - Various assessment instruments
 - Verification of credentials (diploma, transcript)
 - Ensures common standards and assessment for all physicians
- Self-selected cohort of European medical school students/graduates
 - Only those applying to ECFMG for certification
 - Variation in pass rates could be due to individual differences in medical education and/or individual characteristics of medical school graduates



Future Directions

- Coordination of additional research
 - Determine to what extent ECFMG data is representative of all students
 - Examine characteristics of medical schools
 - Develop resources on undergraduate and postgraduate medical education
 - We are interested in collaborating on these issues