[MUSIC PLAYING]

STEPHEN ARNOLD: Hi, my name is Dr. Stephen Arnold and I thought we'd talk a little about cardiac catheterization. Cardiac catheterization really reflects the changes in medicine and cardiology over the last 30 years. 30 years ago, it was descriptive and reactive. As time has progressed, cardiology and cardiac catheterization has been proactive-- ways to affect anatomy have been developed and are being improved upon.

In the 1980s, balloon angioplasty was in its beginnings and in its development stages. There was still the need for cardiac surgical backup, as 20% of cases initially required surgical intervention immediately. This gave way to cardiac stenting, where the results improved. Potential for complication markedly diminished, such that the number now is approximately 1% requiring urgent cardiac surgery related to intervention.

Additionally, it was no longer the stable case, it is also the acute cases. So in the 1990s, acute myocardial infarction interventions began. The results improved. The mortality rate decreased and this has become the standard of care presently. The evolution of cardiology has continued from that point-- stents have gone from bare metal stents to drug-eluting stents, where the restenosis rate has essentially been reduced by 70% or more. In addition, more complex lesions can be approached.

In addition to the coronary interventions, valvular interventions have become more prevalent in the new millennium. Aortic valves are moving towards a percutaneous approach for what will be the great majority of implantations in the near term. Mitral valve is now at the place that aortic valvular replacement was in, perhaps 10 years ago.

All these are exciting changes and offer patients options that will provide improved outcomes, reduced morbidity and hopefully, reduced mortality related to procedures. Recent developments have involved bioabsorbable stents and also access is no longer ephemeral. It is as much, or more commonly, from the radial approach, which turns out to be safer than the old ways. All in all, it has been an interesting area to work. It has been rewarding as patient outcomes have improved and I look forward to seeing what evolves in the near and moderate term.

[MUSIC PLAYING]